UPDATED REPEATER INDEXES - NC, SC, VA, WV, TN, KY, GA INSIDE!

REPEATER JOURNAL

SouthEastern Repeater Association, Inc.

AUGUST
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Repeating Down Under!

—A Ham's Trip To New Zealand

See Our Cover Story

Inside:

- The Second Battle of Vicksburg
- Packeting in WV
- FCC News
- And Much More!

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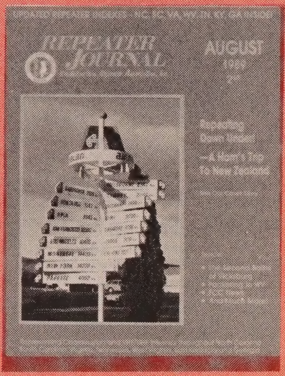

ON THE COVER

Thousands of Miles from anywhere. This quaint sign is on the North Island of New Zealand. Roaul and Merilyn Wright give us a birds eye view of this fantastic country in our Cover Story, "Repeating Down Under." Color slide ctsy, Roaul Wright, K4EAJ.

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REPEATER JOURNAL

NATIONAL AWARD WINNER

SOUTHEASTERN REPEATER ASSOCIATION · sera · MEMBER

·SouthEastern Repeater Association, Inc.

Editorial Comment

Aug.; Sept.; Oct. 1989
Volume 18; No. 3
ORGANIZED IN 1971
"In Our 18th Year"

"No Code" or No "No Code....."

The battlelines are again being drawn. The two opposing factions are the Amateurs who want to see a new "no code" class entry license, and the others who believe code is the tool that makes the difference.

In the early '80s, FCC Docket 20282 killed no code in what was described as "forever". Apparently a "no code" type Amateur license is being discussed, this time not so much by the FCC, but by the Amateur community itself, especially the Amateur press.

Several no code license proposals have been submitted to the FCC. Even the ARRL has set up a steering committee to investigate the feeling of League members toward no code.

CQ magazine has published a survey and surprisingly, a majority of the respondants, even League members are in favor of some form of "no code" entry license for the Amateur radio service.

A few years ago, when Docket 20282 was being considered, the "no code" proposal in that far reaching docket was violently opposed by a huge majority of Amateurs.

Now, it seems some have changed their minds. Why? I believe that the average Amateur of today is recognizing that the Amateur service is not at a healthy growth rate. The average age of the Amateur population is in the 50s, and nothing else that has been tried is working to bring in an influx of youngsters into the Amateur ranks.

The fear continues as it has been over the years, "use it or lose it" and as frequency spectrum becomes more valuable, our fear of losing more bands becomes more visible in our minds.

As of this date, the Commission has not really come out in any proposal for a new type Amateur license, but with a volley of proposals submitted, some or several combined will surely become a "Notice of Proposed Rulemaking".

Those In Favor of "No Code"

Some of the comments for "no code" say:

- "...growth in Amateur radio, especially in the younger segment of the population is essential.". "No code is a barrier, rather than a filter.

- "Code has not been used in most of my 40 years as an Amateur," says one petitioner." He recommends various elements by tested by applicants, depending on which type emission they wish to use - code, facsimile, teletype, television or voice, instead of code for all classes.

- When the Global Maritime Distress and Safety Stytem is implemented in 1993 and mandatory in 1999, the reason for requiring prospective Amateurs to pass code tests will be eliminated.

- Morse code was once the only way to make radio comunications. Now it is just a facet of an entire spectrum of possible methods of communication. It is no longer in keeping with the basis and purpose of Amateur radio to stress one facet of radio communication over all others. Knowledge of code doesn't eliminate rules violations or uncourteous operations.

An ARRL code-free Study Committee released findings to the ARRL executive committee last Summer. The group said it proposes a new class of Amateur radio license, with a written examination somewhat more comprehensive than the present Technician exam.

Those Against "No-Code"

A lot of the people still opposed to offering a "code free" Amateur grade license argue that code is the "buffer" that should remain to assure the prospective ham has to work a little "harder" for his privilege of an Amateur license.

One of the more reasonable arguments I have heard, mentions the statement-"a code-free license will enable thousands of youngsters to come into our ranks". The arguments say that "it is not believed that anything will cause thousands of youngsters to come into our ranks." "The kids of today are busy, TV, computers, a fast world, and something like elimination of CW certainly

Continued on Page 44

REPEATER JOURNAL

Aug.; Sept.; Oct. 1989

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Encourage Your Friends to Join SERA. The Repeater Journal is must reading for the VHF/UHF operator. It keeps you informed and on top of all repeater news in the Southeastern States.

About Associate Membership

Repeater users and Amateurs are invited to join SERA as Associate Members. A membership fee of $6.00 per year will enable members to support the organization and receive the "Repeater Journal". Associate Membership deadlines are on the 15th of the month preceding months of publication — Jan. 15, April 15, July 15 and October 15. Persons joining or renewing their membership must have their application into the Winston-Salem Post Office Box by these deadlines to receive the next upcoming Repeater Journal in February, May, August and November. Memberships received after any deadline will not receive next to be published Journal, but instead will receive the forthcoming issue the following quarter. HOT-P Associate Memberships are limited to one year duration at $10.50 per year. HOT-P, your Journal is mailed on Friday FIRST CLASS mail. Regular memberships are mailed on MONDAY, Third Class Bulk. SERA does not issue receipts for Membership applications. Members should wait until next Journal comes out to report any problems to the Associate Membership Chairman, P.O. Box 24292, Winston-Salem, N.C. 27114-4291. Associate Members may hold appointive positions within SERA.

About Full Repeater Membership. . .

Officers and Directors are elected from repeater representatives who are Full Members. Any repeater owner or club may join SERA as a Full Member if they have an operable repeater on the air. Full Membership application, coordination information (if not on file) and $15.00 should be submitted for the annual Full Membership fee. Two Full Members receive the Journal from each application. The Full Member repeater is also appropriately recognized as a SERA supporter in the repeater index. Full Memberships all expire on December 31 of each calendar year.

About the Repeater Journal. . .

The SERA REPEATER JOURNAL is published quarterly, during the months of February, May, August and November of each year and mailed free to members of Southeastern Repeater Association, a seven state repeater coordinating organization made up of repeater owners and users. Permission is granted for use of material contained in the REPEATER JOURNAL provided proper credit is given. The REPEATER JOURNAL Editor will swap newsletters with other Repeater Councils and News organizations upon written request. DEADLINES: Ad space reservations are the 20th of the month, and ad copy due the 1st of the next month. ONE MONTH prior to publication. News deadlines are the first of the month prior to publication month. The REPEATER JOURNAL is entered as Third Class Mail at the Post Office in Greensboro, N.C. Cover price for the REPEATER JOURNAL is $2.50. All news and Newsletter exchanges should be mailed to the editor: Wayne C. Williams, K4MOB, 600 Lakedale Road, Colfax, N.C. 27235.

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The SouthEastern Repeater Association, Inc. is one of the largest and most well respected Non-Profit repeater coordination councils in the United States. SERA territory covers over 1,300 repeaters in member states of North Carolina, South Carolina, Virginia, Tennessee, West Virginia, Kentucky and Georgia. In our 18th year, our goal is to continue to provide a pleasant operating condition in the VHF/UHF spectrum of Amateur Radio through Coordination and information.

SERA Board To Meet In August

— by Wayne C. Williams, K4MOB, Editor

The SouthEastern Repeater Association, Inc. will hold its 2nd Board meeting of 1989 next weekend.

The two top items on the agenda will be the appointment of a nominating committee for officers, and consideration of a new District Petition from Mississippi, and the extension of East Kentucky to the entire state.

District Directors are expected to review the status of SERAs position on the ARRL Repeater Directory, and the National Data Base. They will also be updating reports of happenings in their Districts.

Preparations are expected to be started through the Directors and the SERA computer operators to mail data base printouts to all repeaters in the territory sometimes in November, tied to renewal time for Full Membership.

Plans will also be made to get the entire state of Mississippi and Kentucky on the SERA data base.

Officer Elections

On even-numbered years, SERA holds elections for new officers, for two year terms. A nominating committee is selected, and they are required to come up with nominations for the offices of President, Vice-President, Secretary and Treasurer.

The nominating committee's recommendations will be published in the November issue of **The Repeater Journal** along with a nomination form, allowing any Full Member to nominate "from the floor" any qualified Full Member of SERA to any office.

In the case of a nomination from the floor, the Secretary will mail ballots to all qualifying SERA Full Members for a vote of their favorite person for that office.

If there are no nominations from the floor, the Nominating Committee's recommended nominations for each office are automatically elected to a two yeai term, beginning January 1, 1990.

Our Present Officers

Officers of SERA whose terms expire on December 31, include:

President - Carter Cogle, K4ARO o Petersburg, VA. Carter has served severa terms as president, in addition has beer Director, Secretary and served in various other capacities with the organization for the past 15 years.

Vice-President - Nita Wofford, N4DON of Memphis, TN. Nita is ending her first term as SERA VP. She previously has held the office of secretary.

Secretary - Barbarra Gregory, WA4RMC of Chattanooga, TN. Barbarra is completing her first term as Secretary of SERA. She has previously held office as Assistant Director for Tennessee.

Treasurer - Ray Adams, N4BAQ of Knoxville, TN. Ray is completing his 4th term as Treasurer of SERA. He is credited with obtaining tax exempt status for the organization during his first term.

None of the present officers have indicated whether they plan to run for re-election for another term or plan to drop out.

Mississippi - Vote is Planned!

With a lot of hard work from Steve Grantham, N4DWU, the present Mississippi Coordinator, all repeater owners in that State have been polled and offered the services of SERA. We have not seen the results of the statewide poll but we do know that enough repeaters have sent in petitions, and Full Membership applications to qualify the State as the 8th District of SERA.

The Mississippi situation was unique; in that the actual coordinator, who has virtually worked alone; has ramrodded the effort to join SERA. It is expected that if the state poll of repeater owners shows a favorable response toward SERA, the Board will certainly vote the State in as a new SERA District.

If the vote is affirmative, the Full Member repeater owners will choose a Director and Vice-Director to run things in that District. The term will run through December 31, 1990.

The SERA Data base operators will also be writing to each repeater owner; and sending data sheets to complete; so SERA will have an up-to-date listing of all Mississippi repeaters, which are estimated at about 75 machines. The listing should be ready in time for inclusion in the November Repeater Journal.

West Kentucky Joins East

Larry Malone of Hodgenville, Ky. has spearheaded an effort in the Western and Central part of Kentucky to join SERA. Enough repeater owners have filed petitions and joined to quality that section of the State to be merged with the Eastern Kentucky District of SERA. Terry Estes, WB4ASZ of Winchester is the present E. Ky. Director; and will assume Directorship of the entire state; if an affirmative vote is forthcoming from the SERA Board. A Vice-Director will probably be appointed or elected from the remainder of the State.

It is not official, but it's expected that with the merging of West and Central Kentucky with the East Kentucky District; the District will be renamed simply **"Kentucky District"**.

Even though the addition of Western Kentucky will not add to the number of SERA Districts; it will complete the entire state under the SERA Coordination Umbrella. This will bring in approximately 80 additional repeaters making the State total in excess of 120 machines; and the fifth largest District of SERA.

The upcoming Board meeting promises to be quite interesting, and much information will be covered in the weekend the group is together. We will have a complete report in the November Journal.

1990 Hamfest Calendar To Be Published In November Issue

We plan to publish the entire 1990 Hamfest calendar in the upcoming November issue of the **Repeater Journal.** This yearly practice has become a must reading for scores of dealers and professional fleamarketers who attend hamfests in the Southeast.

If your club is planning a hamfest in 1990; or you have your 1990 date confirmed; be sure to drop the Repeater Journal Editor a card; confirming the date so your show will be listed on its proper date early.

Many new shows are coming along every year. They choose "open" weekends, often based on what is listed in the Repeater Journal.

You can "protect" your show date; as well as get an extra 3 months advance publicity by providing your date early and having it accurate in the November issue.

Deadline for changes in the 1990 "Hamfest Calendar" for the November issue is October 10th.

Repeater Datasheets Will Be Mailed Out Again This Year

According to Membership chairman, David Ward, KA4LVO, a complete set of Datasheets for all repeaters in the Southeast will be generated in late October and mailed in November to each repeater owner.

The owners will be encouraged to look over the datasheets and make any corrections, changes or additions necessary to give the SERA database accurate information on that repeater.

The Datasheet will also have a place to check if the repeater owner wishes to join SREA, or renew as a Full Member.

All current Full Memberships expire on December 31.

SERA Repeater Index To Expand In November

With the expected affirmative vote by the Board in August for repeaters in Mississippi and Western Kentucky, the **Repeater Journal** directory of Repeaters will expand to cover the repeaters in those areas.

The Western Kentucky repeaters will be merged alphabetically with existing Eastern Kentucky repeaters under "Kentucky Repeaters". A separate "Mississippi Repeaters" listing will be added to the other seven States of repeaters.

This will bring repeater listings in the **Repeater Journal** to approximately 1;300, listed by February; and then again by State, by City, or a total of over 2;600 entries.

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32ND ANNUAL

SHELBY N.C. HAMFEST

THE GRAND-DADDY OF THEM ALL

VOLUNTEER EXAMINATIONS BY CHARLOTTE V.E.C., SATURDAY, SEPTEMBER 2 only, 9:00 A.M. at CLEVELAND COMMUNITY COLLEGE adjoining Hamfest grounds. Cut-off day August 26, 1989. Send completed Form 610 (September 1987); photocopy of present license, and certificates, if any; check or money order for $4.50 fee; and note stating what elements you desire to: CHARLOTTE V.E.C., 227 Bennett Lane, Charlotte, N.C. 28213. Appointment tickets will be mailed. NO WALK-INS. Applicants must bring original copy of present license, and certificates, if any, to place of examination.

Pre-Registration Form

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the SHELBY HAMFEST.
Enclosed is my check for:

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SARCLUB
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_____Hamfest Tickets at $4.00 each . . . $__________

UNDER 12 FREE

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CITY ____________________

STATE ______________ Zip______

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Pre-Registration Tickets Will Already Be In The Barrel

Saturday & Sunday
September 2 & 3, 1989
Shelby, NC

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To Be Held At The
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Shelby, N. C.

PRE-REGISTRATION AWARD:
ICOM IC-2AT HAND-HELD TRANSCEIVER, WITH BC-35 DROP-IN CHARGER. Drawing at 11:00 a.m., Saturday, September 2, 1989.

MAIN AWARDS:
Drawing both days at 2:00 p.m.

Saturday - ICOM 228-H 2 METER TRANSCEIVER

Saturday "SPECIAL PRIZE" - Alinco DR-510T DUAL BAND TRANSCEIVER

Sunday - First award - ICOM IC-761 H.F. TRANSCEIVER

Second Award - ICOM 725 H.F. TRANSCEIVER

Third Award - ICOM IC 228-H 2 METER TRANSCEIVER

Fourth Award - ICOM IC 2AT 2 METER HAND HELD TRANSCEIVER

You do not have to be present to win the above awards.

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Special Saturday Award - Provided Free by ALINCO ELECTRONICS, INC.

For General Hamfest Info:
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Shelby, N.C. 28150
Phone: 704-482-4507

Larry Vassey, N4IJB
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For Dealer Registration
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GATE NEAR INTERSECTION OF
HWY 74 BUSINESS & HWY 180

W4NYR
SARCLUB
SHELBY AMATEUR RADIO CLUB

32ND ANNUAL

SHELBY N.C. HAMFEST

THE GRAND-DADDY OF THEM ALL

LOCATION:
Cleveland County Fairgrounds on U.S. 74 Business, at intersection of N.C. 180, 3-1/2 miles east of Shelby, N.C.

FACILITIES:
Indoor buildings for all new equipment dealers. Over 15 acres for all types of tailgating. Plenty of FREE parking outside grounds.

FOOD:
There will be food service on the grounds. Most of Shelby's restaurants are within a few minutes drive of the Hamfest site.

REGISTRATION:
$4.00 for pre-registration (see enclosed form) and $5.00 at the gate. All tickets good for both days. Children under 12 FREE. Pre-registration ticket requests received after August 20 will be held at front gate.

OVER-NITE CAMPING:
Facilities include over 40 sites with full hook-ups, water, sewer and electricity. Sites available on first-come basis and **none will be reserved under any circumstances.** Unlimited field space for self-contained units.
$8.00 per day for full hook-ups (lights, water & sewer)
$5.00 per day for water & lights
$3.00 per day for tents, etc.
ATTENTION MOTOR HOMES: If you must drive your motor home away from your campsite, please notify the camping committee chairman, N4JFK, and receive your "Campsite Occupied" sign.

FLEA MARKET:
Charges: one admission ticket for a 10 foot space, plus one additional ticket for each additional 10 feet of space used. Gates open at 6:00 a.m., Saturday and Sunday.

All vehicles entering Flea Market area will have to pay an additional $3.00 charge if you are not a Flea Market vender. (This does not affect Commercial Dealers and campers).

ACTIVITIES:
Bingo for all ladies on Sunday morning following Sunday School. Sunday School to be held Sunday morning on hamfest grounds at 10:00 a.m.

TALK-IN:
146.28/88

Question Pool Committee Meets

Ray Adams/N4BAQ, Chairman QPC
Fred Maia/W5YI V-Chmn QPC
Bart Jahnke/KB9NM Member QPC

July 7, 1989 - Volunteer Examiner Coordinator's (VEC'S) representing 97% of all amateur radio testing met today at their fifth annual conference in Gettysburg, Pennsylvania. The VEC Question Pool Committee (QPC), an internal committee charged with the responsibility of maintaining the question pools, decided upon the following schedule regarding Part S97 changes as they apply to Amateur Radio testing.

No. 1. Written Elements 2 (Novice) and 3(A) (Technician) as released into the public domain on February 1, 1989, will be implemented unchanged on or before November 1, 1989, as previously announced.

No. 2. Recognizing that **all** question pools now differ substantially from the freshly rewritten Part S97, the QPC recommends that all Volunteer Examiners (VE'S) use discretion in grading those questions where the question or the published answer may now differ from the rules to be implemented on September 1st. VEC'S are requested to encourage their Volunteer Examiners to implement these recommendations.

No. 3. In view of this the QPC will publish a "discretion list" of question numbers for each pool. We recommend discretion be used when exercising the authority reserved to the VE by Part S97 for selecting questions for design or grading of an examination. In other words, VE's may want to eliminate these questions from their examinations—or, if used, they may accept an alternate answer which is in accordance with the new Part S97.

No. 4. Following the publication of a discretion list, the QPC will then release a supplement to each existing question pool which will bring the pool into conformity with the new rules.

No. 5. We will commit to the following releases:

- 9/18/89 - Discretion list for Elements 2 & 3(A)
- 3/1/90 - Element 2 and 3(A) supplements
- 7/1/90 - Implementation of above supplements
- 7/1/90 - Discretion list for Elements 3(B). 4(A) & 4(B)
- 8/1/90 - Element 3(B), 4(A) & 4(B) supplements
- 11/1/90 - Implementation of remaining supplements

No. 6. The above schedule may be completed sooner if circumstances permit.

No. 7. All subsequent question pool revision schedules are hereby suspended until the Sixth Annual VEC Conference on June 15, 1990.

Associate Membership For Repeater Users

Do a ham friend now a favor. Show him the **Repeater Journal** and encourage him to join SERA. He will get the Journal every quarter for a year.

Remember, the Repeater Journal is the **only** accurate source of repeater listings and hamfest dates in the Southeast. No other publication comes close.

Associate Membership is only $6.00 per year. If you desire to get the Repeater Journal via First Class Mail, the day it comes from the printer, 1 year is only $10.50.

Rock Hill Hamfest

The York County ARC will host the annual Rock Hill, SC hamfest on October 1st at Joslyn Park. Food, flea market, venders. Talk-in on 43-03.

For further info, write York Co. ARS, P.O. Box 4141 CRS, Rock Hill, SC 29731.

New! JARSFEST 89

The Johnston ARS (NC) will conduct their first JARSFEST 89 on October 1 at the American Legion Complex in Benson. Doors will open at 8 a.m. Prizes, fleamarket, vendors. FCC exams will be given by pre-registration only. Cutoff date is Sept. 23. For info contact Vince Yakamavich, AA4MY, 220 Carriage Trail, Raleigh, N.C. 27614. (919) 842-8512.

Talk-in on 87-27. For hamfest info, write Johnston ARS, P.O. Box 1154, Smithfield, N.C. 27577, phone evenings, (919) 934-0486 or 894-5479.

SouthEastern Repeater Association, Inc.

FINANCIAL REPORT FROM JANUARY 1 TO JUNE 30, 1985, 1986, 1987, 1988, AND 1989

Dues	$4/$8	$5/$10	$6/$15	$6/$15	$6/$15
REVENUES	1985	1986	1987	1988	1989
Advertising	$ 4,117.85	$ 3,374.25	$ 3,586.50	$ 4,154.50	$ 4,578.50
Associate membership dues	5,691.88	5,703.00	6,766.50	6,720.00	5,948.25
Full membership dues	2,413.00	2,239.00	2,633.00	3,173.00	3,730.50
Decals	110.00	39.00	16.00	116.50	31.00
Postage - includes HOT-P	48.50	121.00	148.50	81.00	103.50
Hats	-0-	57.37	33.00	36.00	-0-
Contributions	-0-	182.00	102.00	-0-	186.40
Interest	-0-	115.97	210.39	294.59	155.74
Other	6.50	61.14	14.00	12.00	90.00
	$12,387.73	$11,892.73	$13,509.89	$14,587.59	$14,823.89
EXPENSES					
Journal mailing	$ 1,015.67	$ 1,833.08	$ 1,303.28	$ 1,359.16	$ 1,510.21
Journal printing	7,893.41	6,191.24	8,572.22	8,225.06	10,007.43
Miscellaneous	541.32	-0-	59.95	25.00	105.75
Travel and meetings	768.68	1,074.20	1,410.43	261.01	1,822.54
Office expenses	175.22	-0-	35.00	187.08	236.48
Postage - other than journal	144.45	172.66	121.43	410.89	978.02
Printing - other than journal	813.27	10.36	543.50	254.24	336.71
Telephone	219.97	322.27	145.51	539.18	363.55
	$11,571.99	$ 9,603.81	$12,191.32	$11,261.62	$15,360.69
REVENUE OVER (UNDER) EXPENSES	$ 815.74	$ 2,288.92	$ 1,318.57	$ 3,325.97	($ 536.80)
Balances, Beginning of year					
Expenses advanced	$ 900.00	$ 950.00	$ 900.00	$ 900.00	$ 900.00
Invested in office machines	1,344.00	896.00	2,571.63	1,696.00	3,026.00
Cash in bank	1,413.04	2,107.05	5,690.15	7,252.05	5,393.35
	$ 3,657.04	$ 3,953.05	$ 9,161.78	$ 9,848.05	$ 9,319.35
EQUITY TO ACCOUNT FOR	$ 4,472.78	$ 6,241.97	$10,480.35	$13,174.02	$ 8,782.55
Less: Expenses advanced	$ 900.00	$ 300.00	$ 900.00	$ 900.00	$ 900.00
Invested in office machines	1,344.00	896.00	2,571.63	3,053.29	3,026.00
	$ 2,244.00	$ 1,196.00	$ 3,471.63	$ 3,953.29	$ 3,926.00
CASH IN BANK	$ 2,228.78	$ 5,045.97	$ 7,008.72	$ 9,220.73	$ 4,856.55

Respectfully submitted,

Ray Adams

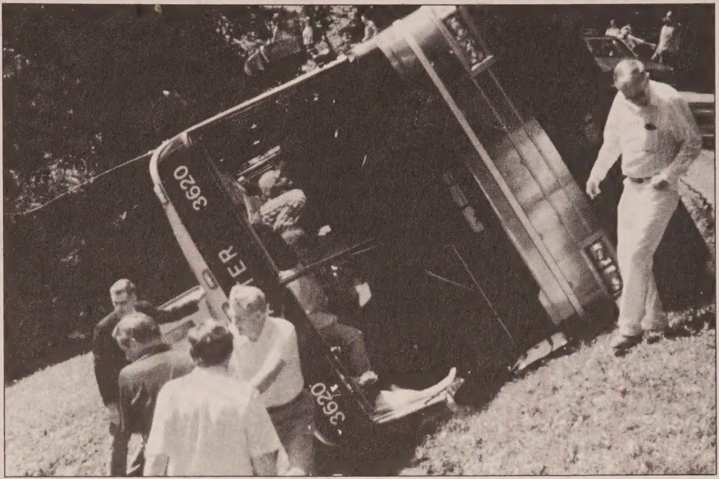
Ray Adams, N4BAQ
Treasurer

The Second Battle Of Vicksburg

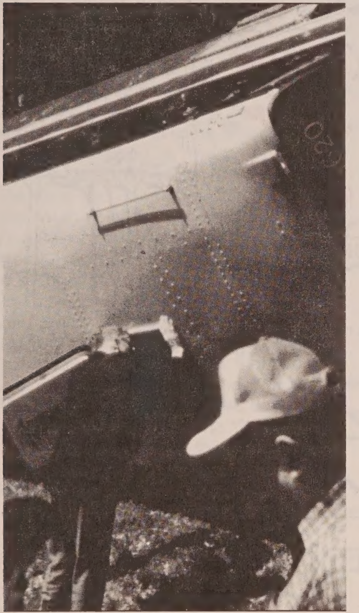
— by Bob Reed, N4LAW

My wife; Colleen always complains about me carrying my Kenwood TH-21AT along on our vacations. It has been with us on trips to Hawaii Europe and this time on a trip down the Mississippi on the Mississippi Queen paddle wheel steam boat from Memphis to New Orleans.

There were about 45 persons from the Archdale; High Point; Thomasville area of North Carolina that flew from Triad International Airport on a Friday morning in June to Memphis. There we were taken by bus to Graceland for a tour of Elvis Presley's home and saw all his gold records two airplanes and other items in his museum.



Bob Reed, N4LAW (in white shirt nearest top of bus) helps other tour members remove the front windshield of the wrecked tourbus to prevent persons insie from having to walk through shattered glass. 38 of the 45 passengers of the bus were taken to the hospital for treatment. Only 12 had to remain with more severe injuries. (-photo ctsy. Bob Reed; N4LAW)



Helping remove passengers from the top skylight of the bus; companions of Bob Reed, N4LAWs tour group wait for emergency vehicles; called via Amateur Radio.

We boarded the boat about dusk and got settled in our cabins in time to change clothes for dinner. All the four or five meals per day served on board were more than anyone should eat; but it was vacation; so everyone enjoyed themselves.

Our first scheduled stop was Vicksburg where we had the option of taking a bus tour through the National Military Park where soldiers from both sides were buried after the battle of Vicksburg. Early Sunday morning; Colleen and I had taken a walk through downtown Vicksburg and I had already tried out two meters on my handheld and had made several contacts with local hams.

At about 1:00 p.m. we were to take a bus with our group to tour the battle field. There were two buses to handle the crowd; and we were a little late getting in line and our group's bus was filled before we got on so we took the other bus as both were to be together on the tour.

Our first stop was a theater where we saw a film on the battle and the hardships endured by the people of Vicksburg. When we came out of the theater; I asked the other bus driver if we might get on the first bus. He said he had only one seat empty; so Colleen and I stayed on the second bus which took us through the town and out to the Military Park where we saw monuments from states of both the North and the South. Illinois was particularly interesting because of its size and unique dome design with the open top. The next stop was at some old cannons and we had our pictures taken, and afterwards our tour director, Marge Clements, sent us to the first bus and she went to ours. When we boarded the bus, we immediately recognized our friends and Marge's husband George asked where Marge was, and we realized that we were on the wrong bus, and Marge also realized her mistake. This was the third time we tried to board the first bus.

From there we went up a steep hill to General Grant's headquarters where he had directed the battle of Vicksburg. There we saw a large statue of him on his horse. All the roads in the park were narrow with just enough room for two cars to pass, and in most places there were no shoulders wider than six inches beyond the pavement. The terrain on either side of the roads was either steep drops or high hills depending on which window you were looking out of at the time. The road leading away from Grant's headquarters was steep and narrow and down hill. The first bus was ahead of us and had gone around a curve and was just out of sight.

When we came around the curve, someone in the front of the bus said that it looked like a car had overturned on the curve ahead of us. Then someone else exclaimed that it was not a car, but it was our other bus! You can imagine the fear and excitement that ensued. I called for all able bodied men to get off our bus and to go to the aid of my friends on the other bus, and they all did quickly.

When we arrived on the scene, about 50 yards ahead, the bus was on its side and about ready to turn around 90 degrees on

Continued on Page 20

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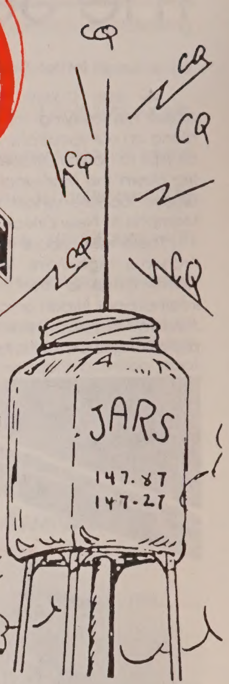

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Special To The Journal

Repeating Down-Under Part I

— by Roaul Wright, K4EAJ/ZLOAHS, and Merilyn Wright, WA4NRX/ZLOAHT

Roaul and Merilyn visit with Dave and Aola Johnston (ZL1AMN and ZL1ALE) at their home in Auckland, New Zealand. The Johnstons were to return the visit to Tennessee this summer, but circumstances prevented them from making it. (Photo by: Roaul Wright, K4EAJ)

I first visited the down under during the late 1950's when I was in the U.S. Air Force and was stationed in the Pacific and served on an air crew which hauled air cargo to the U.S. affiliated islands and countries throughout the Pacific, Asia, and occasionally North Africa. When IGY-57 (Operation Deep Freeze) was in operation in 1957, we hauled cargo from the Phillippine Islands to Christchurch, New Zealand, and from there the cargo was loaded on ski planes and flown to McMurdo Sound, South Pole. We flew to New Zealand numerous times but never did have the time to really see the islands—fly in, unload, refuel, and back for another load. At that time, I thought some day I will go back to New Zealand for a vacation and spend some time.

New Zealand is made up of two beautiful large islands on the other side of the world and down-under somewhat near the South Pole. The people are of English and Polynesian origin and are some of the friendliest people in the world; you never met a stranger there. The North Island is about 350 miles long and about 100 miles across and volcanic in some areas. The South Island is quite different, it has very high snow covered mountains called the Southern Alps and is a bit larger than the North Island. The two are separated by the ocean and are about 50 miles apart. The national language is English and the accent is a hint of what you would hear in the British countryside. their monetary system is New Zealand dollars, about 60 US cents to the NZ dollar; they use a 20 cent coin instead of our 25 cents. One noticeable difference is they drive on the other side of the road; and instead of calling it the left side, they call it the correct side.

The time came to start making preparations for the visit to New Zealand and six months was not too early to start getting things in order and making plans. The seasons are reversed in New Zealand and midsummer is in December and January and the best time to visit is in their summer months. Although you do not have to have a visa for New Zealand, you do have to have a passport to leave the U.S. and return as well as entry and departure from New Zealand. Since the U.S. and New Zealand have a reciprocal amateur radio license agreement, it would enhance the visit by taking VHF/UHF equipment to talk to the local hams. You have to apply for a New Zealand amateur radio license with their equivalent FCC. ARRL has the applications and instructions of how to prepare the forms and to whom to send them. Their procedure is not much different than our own, typical "red tape." You have to send copies of your US license with the applications and there is no fee. You go to the Commissioners office when you arrive in Auckland to get your temporary operating license, it is good for three months. One must make sure to have a copy of the US amateur radio license with any equipment when traveling, customs of both countries are sensitive to radio transmitting equipment and proof of legality must be close at hand. A copy of the New Zealand application could be helpful when clearing customs there.

Cover Story

Upon arriving in Auckland, the first challenge was to try to drive on the wrong side of the road (XYL said that should come naturally for me). The Hertz rental car also had the steering wheel on the wrong side and every time I turned the signal light on the windshield wipers kept coming on; it was on the wrong side. I would have really been in trouble if the brake was backwards, at least I could stop. All your natural driving habits were of no use down there. After circling the airport a few times, I managed to find the exit. The next challenge was to find the Communications Commissioner in downtown Auckland without a traffic mishap, which with a bit of luck we found the office.

When you get your license from the Commissioner, they will give you information on their operating frequencies, band plans, repeater frequencies, location and call signs of all repeaters. They gave us a map with the location of repeaters and lots of other helpful operating hints. I hope our Commission is as accommodating as theirs. Their VHF repeaters use 50 kHz separation and 600 kHz offset so our equipment is compatible with their repeater system. Their UHF repeaters operate from 430-440 mHz with 5 mHz offset so there was no problem there either: they do not have a 220 mHz band. The repeaters are not required to have any identification. All active VHF/UHF amateurs know where the repeaters are at and what club is responsible for it. There are no private repeaters in New Zealand and all repeaters are club owned and "open." There are approximately 50 repeaters scattered throughout the two island and are generally near the larger cities; however, there are many areas without repeater coverage. They do have an impressive linking system which links the North island to the South island. You can go into the system from a local repeater and cover both islands at the same time. This makes for excellent coverage in the areas which have repeaters. Since there are only about 4000 hams in New Zealand, there are lot of areas without hams and repeaters would be useless. The population of New Zealand is about 4.5 million and, like the repeaters, they are concentrated around the larger cities. If a radio club wants to put up a repeater, it must show the need for it and be approved by New Zealand Association of Radio Transmitters (NZART) and the Commission. NZART is similar to our ARRL and publish "Break-in" magazine monthly, even the diamond shaped ARRL symbol is similar. Almost all New Zealand amateur radio operators are members of NZART since it is the only amateur radio association and publishes the only amateur radio magazine there.

When we got our new calls in Auckland, ZLOAHS and ZLOAHT, we just had to break out our handy-dandies and try out the calls

Continued on Page 13

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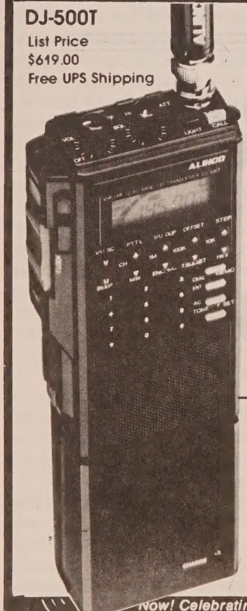

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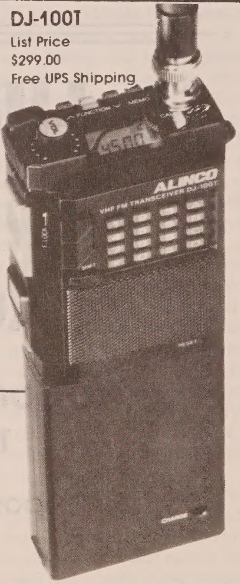

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North Carolina Packet Radio Council

by Charles Layno, WB4WOR

In August, 1988, the North Carolina Packet Radio Council was formed. This new group would be made up of persons who have an interest in the new communications medium of Packet Radio.

The objective of this new group would be to provide a forum to exchange information and views on Packet Radio while promoting the orderly growth of all digital communications in North Carolina including a voice in digital radio frequency co-ordination, high speed node locations and co-ordination with other groups in all matters involving digital communications. This new group would also provide technical assistance and information exchange of the digital medium and to provide a Public Service where needed.

The first item to be tackled was instituting some sort of higher speed backbone. After a time, the Hamilton Area Packet Network 4800 baud modems were determined to be the first step in instituting a higher speed backbone. This backbone would utilize the existing 145.01 Mhz backbone by running dual speed 1200/4800 baud nodes during the conversion and thereafter use 4800 baud exclusively on 145.01 Mhz. At the same time, institute Local Area Networks in the areas that do not have them. To help reduce loading on 145.01 Mhz, move all 1200 baud traffic onto those Local Area Networks. Statewide connectivity for 1200 baud users would be maintained bvy gatewaying over to the 4800 baud 145.01 Mhz backbone from the Local Area Networks. There would be certain 145.01 Mhz nodes that would continue to operate dual speed, to insure compatibility with surrounding states. At sometime in the future, as other frequencies begin to be used into and out of North Carolina, these dual speed nodes would be phased out to single speed nodes on separate frequencies.

The second item is to continue experimenting with faster speed modems and new frequencies that will help relieve the congestion on our packet frequencies as well as software development. One of the local groups in the North Carolina Packet Radio Council are into packet software development. Their most widely known software is the Packet Terminal Program or PTP, and its later cousin, RTP, both written by N4PY of Raleigh, NC. These two terminal programs give packet operators a wide choice in the operation of their packet stations with 3 level split screen, auto connect sequence, and the round-table function, Net Master, among other features.

The current slate of officers for the North Carolina Packet Radio Council are, President, WA3JPY - Mark Bitterlich of New Bern, NC, Vice President, WB4WOR - Charles Layno of Greensboro, NC, Secretary/Treasurer, WB2LEI - Jerry Malin of Charlotte, NC. The newsletter editor is KK4L - Ken Dresser of Charlotte, NC.

Additional information about the North Carolina Packet Radio Council can be received by writing, Jerry Malin, WB2LEI, 709 Madres Lane, Charlotte, NC 27609.

Montgomery Hamfest

The Montgomery ARC (Al) will host their 12th annual Hamfest on Saturday, November 18. The event will be held at the Garrett Coliseum at the South Alabama State Fairgrounds.

Free Admission, free parking, all indoors, including the fleamarket, Setups at 6 a.m., doors open at 8 a.m. FCC exams will be held on site.

For more information, write Hamfest Committee, c/o 2141 Edinburgh Dr., Montgomery, Al. 36116, phone Phil at (205) 272-7980 after 5 p.m. CST or weekends.

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August 19 & 20, 1989

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Repeating Down-Under Part I

Continued From Page 9

on the local repeater. Placing a general call with an American southern accent drew lots of responses, we could not get clear until we had exhausted all our batteries. It was obvious that we had to get our equipment set up for recharging our batteries before trying that again; the Yaesu 727 got so hot I had to use a speaker mike. All equipment taken to New Zealand must be able to operate from 220 VAC, 50 Hz, and the wall outlets are "crows foot" configuration.

Our plans for seeing the country were not firm; but since we were in the center of the North Island, we decided to travel north as far a you could go, turn around and then go south as far as you could go. Top to bottom is about 900 miles and we had a month to make the trip and see the country. We had to end up in Christchurch, about the center of the South Island for our plane to Australia.

We stayed several days in Auckland; and while we were there, we met Dave Johnston, ZL1AMN, and his lovely wife, Aola, ZL1ALE, from Papakura. They came over and stayed an afternoon with us, and we had a nice visit. They are coming to the States this summer and will be visiting us here in Oak Ridge. Aola is instrumental in NZ Woman Amateur Radio Operators (WARO), a similar organization to the YLRL here in the States.

Word was put out on the repeater network that two American radio operators were heading north and to be on the lookout for us, we would probaby be lost and driving a rental car on the wrong side of the road. It doesn't take long to get into the countryside in New Zealand. When we left the city limits of Auckland, we were in the country. There are few people between the cities and towns and no auto service so you must be sure you have sufficient fuel until the next stop. Incidentally gas (petrol) sells for $3.00 per gallon so our buck or so a gallon is not too bad after all. The roads are all two lane but there is plenty when there is no traffic. In fact, you will find more sheep than cars on the road; there are 70 million sheep in New Zealand, all white and fluffy.

We kept traveling north talking to the locals on the repeaters and Arlene, AI1BRX, pretty well kept track of us and made sure we did not get into trouble. We stopped at the little seaside towns for the evenings with an occasional dip in the ocean at the beaches. You can have your own private beach if you want one; there are hundreds of miles of beaches and no one on them except for the seabirds and an occasional sheep. Our last most northern stop was at the lighthouse at Cape Reinga, that is as far north as you can go. From there we took the drive down 90-mile beach heading south with 900 miles to go to the south most point.

The food throughout New Zealand is very good and quite reasonably priced. Since it is surrounded by the ocean there is an abundance of sea food; and with all those sheep, lamb is quite plentiful. The local pubs have what they call counter meals or bristro which is served at lunch time and for about $2 you can have all you want of the special-of-the-day, usually listed on a chalkboard out front. You can also have that big steak in the evenings with all the trimmings at reasonable price. The majority of the motels had small fully equipped kitchens if you wanted to cook your own.

Our next major stop was about 100 miles south of Auckland at Rotorura. It is located in a geothermal area where there are steam vents all over the place and plenty of boiling water coming up out of the ground. It takes a couple of days to become accustom to the smell of sulphur which lingers in the air. There are numerous lakes in the area filled with wildlife and black swans. Most of the motels had thermal pools in which you could cook yourself. Rotorura is a very nice city with lots of things to do and see; there is a lot of polynesian maori culture in that area with excellent exhibits. The Whaka Thermal Reserve with all the boiling pools, bubbling mud pots, and geysers is quite impressive and worth a half-day visit. This is a good place to buy your sheep skin coats, hats and wool products, they will ship to you in the States and you do not have to carry them.

We set off to climb a volcano and visit the Lake Taupo area about 100 miles southwest of Rotorura. The fishing here probably has no equal when it comes to rainbow trout. There are very few people living in this region, and you can have a whole lake or stream to yourself. You can rent fishing equipment and even a fishing guide if you want to get the big ones. The volcano was steaming and we didn't get to the top; not much to see down in the hole anyway.

Well it was back across to the east coast to Hastings and Napier to see what we could get into in that area. The twin cities were small with friendly repeaters, excellent sea food, and a very nice aquarium. We picked up some sheepskins, blankets, hats, and souvenirs at a wholesale outlet. They mailed everything back to us by ship and it took about three months; but we were in no hurry. We met Wayne, ZL2UGH, on the local repeater and he and his XYL came over to our motel for a visit. He said he had a brother in Christchurch which was friendly to strangers and we were to look him up when we arrived there. He had friends in Atlanta and tried to contact them while we were there but conditions were a bit poor and the bands were not open to Atlanta.

The next stop would be the last one on the North Island, the capitol city of Wellington. We did not spend much time downtown; the traffic was heavy and it was not much different than home so we stayed most of the time in the countryside. We left our rental car in Wellington and took a ferry across the channel to the South Island. We met lots of friendly natives on the ferry boat and lots of foreign bikers, a popular sport and pastime in New Zealand. Incidentally, the crime rate is extremely low and the kids can hitch-hike, backpack, ride bikes, or travel throughout the country and will never be bothered—including teenage girls.

After a bumpy 4 hour ride across the channel, we picked up another rental car at Pickton. From there we started down the west coast of the South Island to Fox Glacier. As we arrived in that area a few days later, we could see the Southern Alps and the snow covered peaks sticking up into the clouds. We spent Christmas at Fox Glacier on the beach and in view of Mount Cook, all 12,000 feet of it. We planned on climbing it or at least up the Fox Glacier. We drove the rental car until we ran out of roads and the footpath got so narrow and steep it would not go any further then we started walking up the mountain. One does not have to worry about snakes or spiders when stomping around in the bush, New Zealand does not have any. We climbed to the glacier but the mountain was covered with snow and was so steep we left the mountain untamed until a later time. For the adventurous, you can fly up on Mount Cook in a ski plane and land on the glacier. This was my first time to make radio contact from a glacier; they award you a certificate to prove you are a nut.

From Mount Cook it was off to Queenstown, a resort city similar to Gatlinburg but a bit larger. There were lots of tourists there, mostly Japanese. It was mainly sight seeing and buying souvenirs although we did drive up on the Remarkable Mountains to see the Queenstown repeater site. Most repeaters are made up of old commercial units, generally tube-type. Many of them are upgraded by using new WACOM duplexers from the U.S. which is very expensive with all the import tariff and transportation cost to the other side of the world and down under.

A day's journey out of Queenstown over to Milford Sound is a nice outing and a beautiful place to visit. The Sound was carved out of the rocks during the last ice age by glaciers as they flowed to the sea; one can still see the marks from the ice on the towering cliffs. Lunch is served on a two-hour boat ride down the Sound and out to the Tasman Sea. It is a nice drive from Queenstown or there are scheduled planes if your time is limited.

The last stop going south was Invercargill on the southern tip of the South Island. There is another small island off the south coast called Stewart Island, but the weather was pretty nasty so we bypassed it and started back north toward Christchurch. We made an intermediate stop at Dunedin and five days later we arrived in Christchurch where I had been many times before. It is the largest city on the South Island, reminds you a little of an old English town with a central

Continued on Page 14

The Second Battle of Vicksburg

Continued From Page 13

square and a church in the middle. We went out to the old aerodrome where I had been in and out of during the 1950s. Not much left from the old days, a few buildings I recognized. They have an excellent air museum of the New Zealand Royal Air Force and the planes they used to fly as well as the history of New Zealand flying. We met John and Robin, ZL2AWG, and they invited us over for dinner. His brother, Wayne, was right, they were the friendliest people in the world and John is an excellent cook; he works in the kitchen while Robin entertains the guests. John showed us his backyard farm with an okra patch and a radio tower which he has not planted yet. Their daughter Joanna had a cat which we tried to kidnap but they watched it too closely. John and Robin visited the U.S. this summer and almost made it to Tennessee; they got as far as Atlanta but couldn't find the road North—I think we need a new road sign.

Well it's off to Australia for two months and a new adventure in VK land. With our Australian radio calls in hand and our equipment ready, it was goodby to all our new friends in New Zealand.

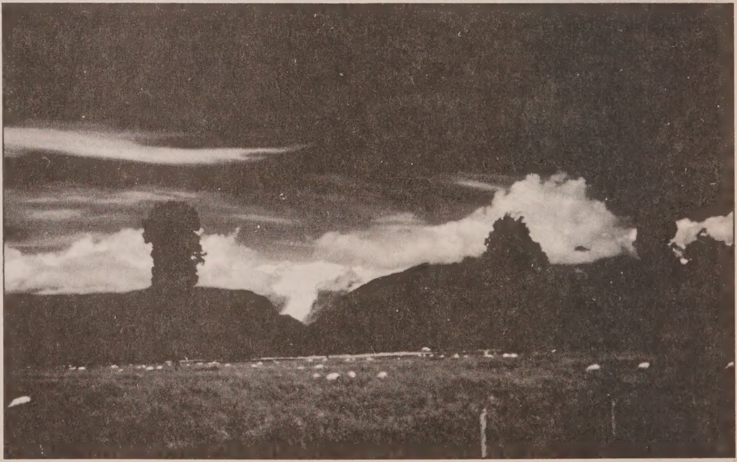
AEA Announces New Antenna Product Line

Advanced Electronic Applications announces its agreement with M2 Enterprises President Mike Staal; K6MYC; based in Pinedale; California; for exclusive rights to its antenna line. Mike Staal is the founder and antenna designer of KLM antennas.

The diverse M2 product line features computer-optimized antennas with the highest gain available. Other features of the antenna line include:

- Electronically tuned balun and drive element design for symmetrical pattern
- "O"-rings on all connectors.
- Stainless hardware in critical area including element keepers.
- Machined aluminum driven elemen housing with "O"-ring sealed acces cover.
- Ideal for use in multiple antenna arrays.
- Built-in "N" connector.
- Driven element housing cavities filled with silicone dielectric material for weathe resistancy.
- Swaged boom sections for better structural strength.
- Tapered booms and solid rod elements to reduce windload.
- Low windload overhead dacron boom support lines for strength and flexibility.

The new line includes several models of antennas for 6-Meters 2-Meters and 430 Mhz. Accessories such as "H" frame support mechanisms upgrade kits and heavy duty elevation mechanisms and controllers will be available. Power dividers for 6M; 2M; from 2 port to 8 port will also be offered.



Breathtaking! The best descriptions you can use when looking at the deep blue sky and puffy white clouds over the rocky shores and valleys of New Zealand. Blue waters give way to white sandy beaches, finally to green grassy valleys, and rocky hills. We present a few contrasts of New Zealand. 90 Mile Beach on the South Island. Fox Glacier, and Cape Reinga on the northernmost point of North Island. (Photos by: Roaul Wright, K4EAJ)

FCC News Briefs. . . . .

– Compiled via: SERA, News5YI, Westlink FCC and ARRL Newsletter

ARRL Part 15 Motion Denied

— Via W5YI Report

The FCC has denied the ARRLs motion to stay (prevent) the implementation of the new Part 15 Rules; which deregulate much of the old rules on most nonlicensed radio devices.

The ARRL argued that the general radiation limits of the Part 15 devices are too high; and warned against the co-location of these devices and Amateur stations in residential areas in the same frequency bands.

The Commission said "Many of the changes in Part 15 either do not affect amateur operations or would actually reduce the potential that interference would be caused to amateurs. Under these circumstances; they said, they would deny the ARRLs motion for stay.

PRB-3 Is Dead!

The FCC apparently has made the decision not to initiate a special Amateur radio call sign system administered by the private sector.

It all began in 1986 when the ARRL and several other members of the Amateur community requested a way for specific call signs be issued through a system administered in the private sector. In 1987, the Commission issued a Public Notice (PRB-3), requesting comments and proposals to determine whether an Amateur radio call sign system; administered by a Special Call Sign Coordinator (SCSC) from the private sector could be implimented without additional costs to the FCC.

Finally in 1989, the Commission; "after carefully considering the comments; and concluding that a special call sign program would require the diversion of significant resources that are essential to the timely and efficient processing of applications for new and upgraded Amateur licenses." Under these circumstances; they concluded that a special call sign system is not in the public interest; and the proceeding was terminated. (excerps from W5YI report)

Placing Systems On Air Without Checking Bandplan Can Cause Problems To Others

— by Donald L. Williams; Jr.; WA4K
Vice-Director, VA

Many amateur radio operators in **SouthEastern Repeater Association** territory are not aware of two somewhat unusual repeater frequency utilization plan groups in the two meter band. Because of this unawareness; some interference has been caused in several states to legitimate repeaters on these somewhat unusual pairs.

There are actually two groups of frequencies which can have either a plus or minus transmit offset. These are those repeater outputs from 146.805 to 146.895 and from 147.000 to 147.060. As an example; let me mention one particular frequency which has had a problem with a packet frequency.

A repeater on 147.465 input and 146.865 output is in the frequency utilization plan for a two meter repeater and has been duly coordinated. This repeater, however; is experiencing interference by a packet backbone system which is located on 147.465, the exact input frequency of the two meter fm repeater. Another example is that of an fm repeater with an input of 146.415 and an output of 147.015; properly coordinated on a frequency in the utilization plan of SERA. This repeater briefly experienced interference near its input frequency; at 146.415; by a simplex autopatch which the operator thought was within a simplex portion of the band.

In both cases individuals have mistakenly assumed that frequency plans published by the American Radio Relay League constitute a national band plan. This is not the case, however. SERA publishes a frequency utilization plan which is **not the same as the ARRL.**

Regarding the problem of the packet backbone system being on a repeater input frequency; this could have been avoided if that organization had needed the recommended packet frequencies in the SERA Frequency Utilization Plan; which are as follows:

Packet Frequencies:	145.01	145.61
	145.03	145.63
	145.05	145.65
	145.07	145.67
	145.09	145.69

The individual which had the simplex autopatch very kindly moved up above 146.460 when he found out that he had chosen a repeater input for his operation. Acceptable simplex frequencies are 146.50 to 146.58, and 147.51 to 147.57. The group which has packet on 147.465 has not made a decision to move; as of this writing.

Should you plan to operate a simplex autopatch, packet station or packet digipeater, or any other amateur operation, please consult the frequency utilization plan of SERA first, in order to avoid potential interference to a repeater; whether it be local or distant. Don't forget that there are other frequencies which are critical to interference such as those allocated for satellite use.

FCC Refuses To Reconsider 220 Mhz. Issue

— Tnx W5YI Report

The FCC denied petitions from the ARRL, the National Communications System and hundreds of Amateurs and ham organizations asking for reconsideration of its decision to allocate 220-222 Mhz. exclusively to the Land Mobile Service and 222-225 Mhz. exclusively to Amateur Radio.

The reconsideration item was presented to the FCC Commissioners by the FCC's Office of Engineering and Technology.

The presentation; made by Fred Thomas; said a number of factors were important considerations in reaching a decision. He said there was a need to provide spectrum for the Land Mobile Service to foster the development of spectrum efficient narrowband technology.

The earlier Report & Order had concluded that the public interest would be best served by a compromise of allocating two megahertz the 220-222 Mhz. to the Land Mobile Service; and the upper three megahertz to the Amateur Service.

In response to the Report & Order, the Commission received about 700 petitions from Amateur groups and individual amateurs. In general the petitions argued the entire 220-225 Mhz band should be allocated to the Amateur Service on a primary basis.

The ARRL also requested that the Commission hold oral arguments in this proceeding; but it was denied along with all the Petitions for Reconsideration.

According to Dave Sumner, ARRL Executive Vice-President; the ARRL Executive Committee has already decided to ask the U.S. Court of Appeals for the D.C. Circuit to review the FCC decision; in the event the Commission refused to consider the matter on its own.

Now it will be up to the Federal Court to determine whether by so doing the Commission overstepped its bounds.

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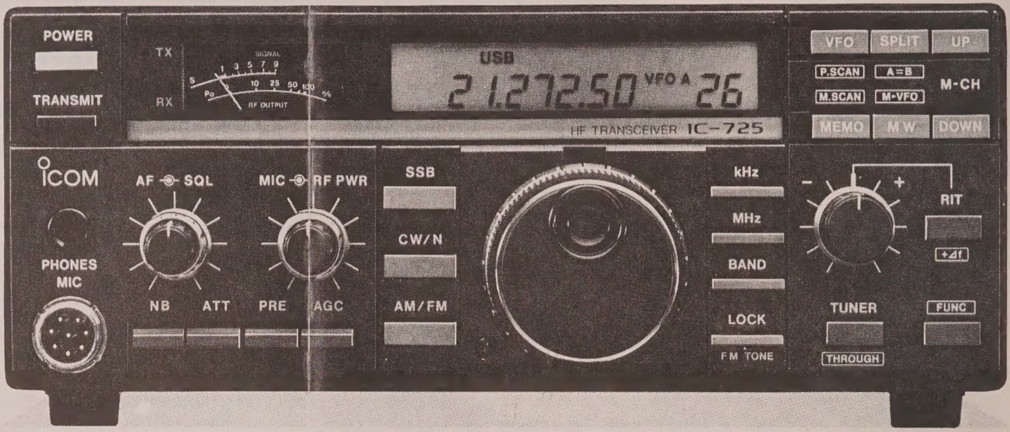

COMPACT, LIGHTWEIGHT, AND EASY TO OPERATE
Weighing in at only 4.6 kg (10.1 lb), IC-725 is great for base station, portable, and mobile operation. This rig comes packed with functions and special features, but it's so simple to operate that even novices will love it.

EASILY CONNECTED TO AN ANTENNA TUNER AND LINEAR AMPLIFIER
By connecting the AH-3 HF AUTOMATIC ANTENNA TUNER, you'll get a fully automatic antenna tuning system. This one-touch system is especially useful for mobile operation. It's a cinch to hook up the AT-150 or IC-AT500 AUTOMATIC ANTENNA TUNER. Connect the IC-2KL 500 W LINEAR AMPLIFIER for 500 watts of power.

INNOVATIVE DDS (DIRECT DIGITAL SYNTHESIZER) METHOD
Enter the DDS (Direct Digital Synthesizer) method from Icom — an innovative digital frequency synthesizer system. Using a gate array, DDS directly creates a digital pseudo sine wave. After D/A conversion, the analog output frequency closely resembles an ideal sine wave. The result: C/N, phase noise and blocking characteristics are greatly improved.

26 MEMORY CHANNELS FOR GREAT CONVENIENCE
Store a frequency and a mode in each of the 26 memory channels, and recall them at the touch of a button. Channels 23 and 24 memorize both receive and transmit frequencies for split frequency operation.

BAND STACKING REGISTER
Enables you to store an amateur frequency, switch bands, and return to the stored frequency. Especially convenient when switching bands during contests, and for quick monitoring of propagation conditions on other bands.

SUPER-SENSITIVE RECEIVER
A dynamic range of 105 dB provides excellent sound reproduction of faint and strong signals on all bands without distortion. The up-conversion system ensures superior image rejection and spurious response characteristics. The sensitivity of 0.15 μV for 10 dB S/N* will help you pick weak signals out of the mud. The receiver incorporates the Icom Direct Feed Mixer (DFM) in the front end for excellent intermodulation and cross modulation rejection.
* 1.8~30 MHz, Preamp ON

MULTI-MODE 100 WATT OUTPUT TRANSMITTER
IC-725 outputs 100 watts on USB, LSB, and CW. Install the UI-7 AM·FM UNIT (optional) and operate AM and FM with 40 watts on AM and 100 watts on FM. Install the UT-30 PROGRAMMABLE TONE ENCODER UNIT (optional) and you can even work FM repeaters on 10 meters. CW semi break-in and sidetone circuitry is built-in. Break-in delay timing is adjustable.

GENERAL COVERAGE RECEIVER
IC-725's receiver section covers 30 kHz to 33 MHz on SSB, CW, AM and FM (UI-7 required for FM). Great for listening to shortwave broadcasts, marine and coastal stations, etc.

THREE SCANS FOR HANDS-FREE OPERATION
Programmed Scan scans all frequencies between two programmable scan edges. Memory Scan scans all memory channels in succession. Selected Mode Memory Scan scans all memory channels with the same mode. Sit back and relax. Let the rig do the work for you.

RECEIVER INCREMENTAL TUNING (RIT)
Use RIT to tune above and below a desired signal within ±1 kHz without changing the operating frequency. The Δf function adds the frequency increment to the operating frequency. This function is a great convenience when working a DX pile-up, operating net control, etc.

BUILT-IN PREAMPLIFIER AND ATTENUATOR
Turn on the receiver preamplifier to boost a signal by 10 dB. If your antenna's gain is insufficient, you need this preamplifier! Use the 20 dB attenuator and prevent saturation of the receiver's front end by very strong signals.

OPTIONAL PLUG-IN CW FILTERS
The serious brasspounder will enjoy our two optional CW NARROW FILTERS: FL-100 (9.0106 MHz; 500 Hz/−6 dB). and FL-101 (9.0106 MHz; 250 Hz/−6 dB). These filters can greatly help out in heavy interference. When the CW filters are installed, select either CW-wide or CW-narrow at the touch of a button on the transceiver.

10 Hz STEP TUNING
Each frequency step is 10 Hz, making tuning as smooth as if using an analog VFO. Or instantly choose 20 Hz, 50 Hz, 1 kHz or 1 MHz tuning steps.

AMPLE HEAT DISSIPATION FOR STABILITY AND SAFETY
The large, sturdy aluminum die-cast frame and inner-flow cooling fan maintain a stable internal temperature. IC-725 keeps the output power stable even after long hours of continuous use.

ALL MODE SQUELCH
The all mode squelch, which mutes the speaker, comes in handy when scanning or when working a 10 meter repeater. Signals and noise that are stronger than the squelch threshold level open the squelch, but those below that level do not.

CI-V SYSTEM
With the built-in interface, you can control IC-725 with a personal computer through the CT-17 CI-V LEVEL CONVERTER. You can also control the frequency, mode, VFO A/B selection, memory channels, etc. of several Icom HF rigs with a personal computer through the CI-V line.

LCD FOR EASY VIEWING
The extra large liquid crystal display (LCD) makes it easy to read the frequency, mode, memory channel number, etc. The soft orange background is easy on the eyes. Turn the 10 Hz digit display on and off at the touch of a button.

TWO VARIABLE FREQUENCY OSCILLATORS (VFO)
With two digital VFOs, you can switch back and forth between two frequencies at the touch of a switch. Especially useful for net operation and contests. Equalize the frequencies and modes of both VFOs instantly.

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WEST VIRGINIA NOTES

By Ted Wolfe, WD4KHL

First a personal note: I was 60 years old on June 8. In May my good friend Garry (WD8OMB) invited me to dinner with him and his wife at a restaurant to mark the occasion. On the appointed night; May 20, I drove 45 minutes to the Hurricane exit of I-64 to meet them in a restaurant. When I walked in there were 24 people present--a dozen hams and members of their families. The surprise party was a success--I hadn't suspected a thing.

My present was an MFJ 1270-B TNC, which replaced my old first generation AEA PKT-1. With it I was able to return to my Vic 20 keyboard for packet which I much preferred to the old Radio Shack color computer.

With the new TNC I plunged anew into the world of packet which has grown tremendously in the Kanawha Valley and West Virginia in the past several years. That renewed interest generated a separate story elsewhere in this issue on the packet nodes or switches now operating in West Virginia.

With packet items in that separate story, my regular column will be a bit short.

• • • •

Since it was to take place after my July first copy deadline for this issue all I can do is mention that a special events station was to operate at Jackson's Mill during the annual West Virginia ARRL Convention and Hamfest sponsored by the statewide State Radio Council. I hope the event was successful for those taking part.

At least once per year the Logan ARC holds a novice class. Recently a group of amateur radio enthusiasts completed the 10-week course at Logan (WV) High School. Out of the class came 17 new novice licenses. Shown left-to-right front row are: Paul Fortune; Jr.; Wyndee Fortune; Pete Frye and Dewey Viars; and back row; Ed Napier; the class coordinator; Jeanie Fortune; Katrisa Elkins; Imogene Elkins; Odetta Frye; Sue England and Roy Elkins; the Morse code instructor. Other new licensees now shown include Sandy Nelson; Ronald Nelson; Jim Chaney; James Chaney; Jimmy Bayless; John Skidmore; Richard Cimprich; Bobby Hall and George Butcher. The very young lady on the front row; Wyndee Fortune; did not actually take the class but attended every time with her dad; Paul Fortune; Jr.; and gave him moral support. (PHOTO CTSY: Bob Johnson; W8VEN.)

Two nets have been reactivated weekly on the Lick Knob W8FG/R 144.870/145.470 Mhz repeater. They are at 8:30 p.m. local time on Monday and Thursday nights.

• • • •

In late May I heard Keith Chambers of Canton, Ohio; ex W8SSA, to speak with him

SPRUCE PINE HAMFEST

Saturday, September 23, 1989

MAYLAND COMMUNITY COLLEGE

Location: Two miles East of Spruce Pine on Highway 19E at Mayland Community College.

Hours: 9:00 AM - 5:00 PM

Tickets: $4.00......Tailgaters $2.00 plus ticket.

Exams: 10:00 AM Sharp.... Walk-in only.... Bring copy of license.

Prizes: 1st - $200 cash....2nd - $100 cash.....Hourly drawings

Bingo: There will be Bingo and other entertainment for XYL's and YL's.

Refreshments: Food and snacks will be available on site.

Dealers: Several dealers will be in new enclosed display area.

Seminar: A seminar on Microprocessors is planned.

Talk-in: 147.375+ (Burnsville) and 145.19- (Mt. Mitchell).

For more info: David McCarty, KK4PW, Rt. 2, Box 73A, Green Mountain, NC 28740
704-682 9270 (days) 704-675 5996 (evenings)

COME ENJOY A TIME OF FELLOWSHIP AND FUN WITH YOUR FRIENDS IN THE MOUNTAINS!

38th ANNUAL

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ON SUNDAY - OCTOBER 1, 1989

AT JOSLIN PARK ON LAKE WYLIE

FROM 0700 - UNTIL TALK-IN 146.43-147.03

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PRIZES! PRIZES! PRIZES!

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SECOND: ICOM IC-28A 2-METER VHF Transceiver

THIRD: ICOM IC-MICRO 2AT 2-M Handheld

PRE-REG: ICOM IC-MICRO 2AT 2-M Handheld

Major Prizes Obtained Through
ICOM AMERICA, INC.

YOU DO NOT HAVE TO BE PRESENT TO WIN THE ABOVE PRIZES

Bingo will be held for Ladies and Children. Due to park rules and available space we will not be able to provide over-night camping spaces.

VOLUNTEER EXAMINATIONS BY CHARLOTTE V.E.C., SUNDAY, OCTOBER 1, 1989 AT 8:30 AM at the Hamfest site. Send completed Form 610 (Sep. 87), photocopy of present license, credit certificate (if any), and check or money order for $4.50 fee to CHARLOTTE V.E.C., 227 Bennett Lane, Charlotte, N.C. 28213. State which elements you desire. Cut-off date September 23. Appointment tickets will be mailed. NO WALK-INS. Applicant must bring original copy of license and credit certificate to place of examination.

REGISTER NOW AND SAVE! **TICKETS: AT THE GATE: $5.00 ea**
PREREGIS: $4.00 ea

Note: All Pre-Registration stubs will be held and placed in the drum for IC-MICRO 2AT drawing at 1100, then put back into the main prize drawing barrel. All requests for tickets received after Sept. 23 will be held at the Gate.

SASE PLEASE. TICKETS WILL BE HELD AT THE GATE FOR THOSE TICKET REQUESTS RECEIVED WITHOUT AN SASE.

PRE-REGISTRATION FORM - $4.00 EACH

Name ______________________ Call __________

Street ______________________________________

City ________________ State ________ Zip ________

Advance Tickets are $4.00 Each

NO. REGISTERING __________ ENCLOSED $ __________

Make checks Payable to:
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MAIL FORM AND CHECK TO:
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ROCK HILL, SC 29731
SASE PLEASE

He's sporting a new call from the last time I talked with him. He is now WQ8H.

Another new call in the area the result of an upgrading is KE8YB belonging to Jim Stephenson, ex KC4CXD, at East Bank. Jim recently retired as an air traffic controller in the Washington, DC area who returned upon retirement to his old hometown.

• • • •

As usual I am indebted to several others for sharing items for the **Journal** with me. Terry North, WB8IFS, Charleston, shared information with me to develop the packet nodes story. The Logan ARC provided information; a picture, and a newspaper clipping on the story of their annual novice class graduation. Ollie Rinehart, WD8V, provided details of the special events operation at Jackson's Mill on July 1 and 2.

A couple of others promised material for stories but failed to come through with the information prior to my deadline. If the material arrives and is still timely I may be able to include it in the column for the next issue in November. The copy deadline for the November issue is October 1st.

I fault myself for failing to check with SERA state director Karl Morris, WB8GDY, for any late coordinations. I just put it off till too late.

If you have information for an item or a story about hams, your radio club, or such, please mail it to me. The address is: Ted Wolfe, WD4KHL, Post Office Box 133, Cabin Creek, WV 25035. Or you can leave info for me on WB8CQV PBBS in South Charleston. I check it every day for packet electronic mail. Pictures of your club's activity are always welcome.

Unless I can slip any late breaking items in past the deadline (I am writing this July 1 and must get it off at the PO before this Saturday noon), that's it till next issue.

Your Color Slides Might Be A Cover!

The **Repeater Journal** is always looking for interesting stories about Amateur Radio; clubs or individuals. If you have a camera and shoot good pictures, why not capture some special event in your area and send the color slide with a story to the Repeater Journal editor.

We try to keep a backlog file of color slides to enable us to have color for every issue. Timely events take precidence, but we generally manage to run all we get.

Be a photographer for the **Journal.** Your color slides **and** black and white pictures are always welcome. Color photographs work too, if they are bright and sharp.

We'll be sure to give you appropriate credit!

AEA Presents Robert Wallar Amateur Ambassador Award

Advanced Electronic Applications; Inc. awarded Robert "Bob" Wallar WB6QNR its 1989 Amateur Ambassador Award at the ARRL National Convention in Dallas, Texas, recently. The award was presented by George Buxton N7EZJ, Executive Vice President of AEA, at the convention banquet.

AEA presents the Amateur Ambassador Award on a yearly basis to the radio amateur who demonstrates extraordinary efforts in promoting the amateur service to individuals new to amateur radio. Bob Wallar WB6QNR was chosen Ambassador because of his utilization of amateur radio in the grade school classroom. Wallar; a science teacher at Luther Burbank School in Artesia; California; feels that amateur radio is an important instructional tool and motivating influence with hs students.

An example of this is Bob's promise to his students to give them an opportunity to talk with a government official. Senator John Glenn agreed to an on-the-air question and answer session with Bob's students. Bob traveled to Washington, D.C. and operated the U.S. Senate Amateur Radio Station, W3USS, with Senator Glenn. Contact was made with Bob's classroom amateur station approximately 3;000 miles away. Students were able to communicate over the air with Senator Glenn and utilize their amateur radio skills learned in the classroom.

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Judsonia, Ar. 72081

To SE Div. Director
(GA, AL, FL, PR)
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Ctsy. SERA Repeater Journal

Name ____________________ Call ________
Street ____________________
City __________ Prov./State __________ PC/Zip ________

$25 in U.S. $33 elsewhere (U.S. funds) Licensed amateurs, or age 65 or over, upon submitting proof of age, may request the special dues rate of $20 in the U.S. $28 elsewhere, in U.S. funds) Persons age 17 and younger may qualify for special rates, write for application.

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA ____________________ Expires ________
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The Second Battle

Continued From Page 7

its top. The front windshield was laying on the ground in two halves just in front of the bus, and the driver was getting out. I later learned that he had kicked out the windshield. Some of us moved the safety glass pieces which were still intact but shattered so that passengers who were able could get out without walking over the glass.

The lady who was announcing the tour with a microphone was standing up beside the driver. He was the only one wearing a seat belt. She was apparently injured badly and was lying across the left front, blocking everyone's exit. She did not want to be touched or moved!

About this time I remembered my two meter handheld which was in my shirt pocket and I put out a "Mayday, Mayday" and my call and location and almost immediately WA5SEG, Frank, came back and asked what he could do for me. I advised him of the situation and asked that he send all available emergency vehicles to the Military Park. He asked me to stand by and in a few minutes called to say that everyone in town from the police to fire trucks and ambulances were on the way. It seems that a taxi driver passing the bus with two couples from our tour group had seen the bus turn over in his mirror after they passed in opposite directions and he had stopped and called his dispatcher. The bus driver later claimed he had moved over to allow the taxi to pass him and when he did his right rear wheel ran off the pavement and with no shoulder, his wheel just started slipping down the bank. When he turned his front wheels towards the center of the road the rear wheels went more off the road and the bus slowly turned over. He was probably not going over 15 miles per hour or less.

Unfortunately, the taxi driver did not know exactly where we were, and neither did I until some local young man told me to tell Frank that we were just below Grant's headquarters, which I should have known, but did not think of it. The emergency vehicles were in another part of the large park looking for us. Frank called the police and gave them better directions and in moments the first police car arrived and parked in the middle of the road and jumped out to assess the situation. A few moments later, the first two ambulances arrived with a fire truck right behind them. I asked Frank to send a wrecker truck as all of us on the outside of the overturned bus were afraid that it would tip over and continue its roll down the hill which was very steep.

There was a small flat area below the road about the center of the bus and this stopped it from rolling over and over until it reached the trees or the bottom of the hill. Those who were sitting on the driver's side of the bus were thrown on top of those sitting on the other side. By this time some of the passengers were able to walk out from the inside of the bus, and the emergency personnel knew what they were doing and had begun carrying others not so fortunate out on stretchers.

A local doctor happened to be riding through the park on his bike. He was dressed in typical biker's attire with tight short pants, helmet and a water bottle strapped on his bike. He examined most all the injured and told them either to go to the hospital or that they were okay. Out of 45 passengers and two bus company employees, 38 were carried to the hospitals in town. Half went to Vicksburg Hospital and half to Mercy Hospital. Only 12 were required to stay. The others were examined, bandaged up and sent back to the boat.

In the meantime, other Hams had heard what was going on and came on when needed to offer their aid. The bus driver needed to get in touch with his boss in Jackson, and Frank first tried to call long distance without success. Then, AA5JC, Wayne came on from Jackson and offered to make any local calls in Jackson, and the bus driver had several to try. His name was Bill Love and he refused to leave the bus until he was sure all were accounted for and he knew that the valuables that spilled out of passengers pockets were safe. No one was allowed on the bus other than emergency personnel and Bill. Almost all of the passenger's valuables later turned up and were brought to the boat by local policemen.

Frank told me that he was coming out to see what he could do to help me, and when he arrived, I found that he was a Motorola salesman and had a commercial radio, a low band rig, and a two meter rig plus a cellular phone in his car, so I really hit the jackpot when I got him to answer my first "Mayday" call. With Frank's help we arranged to have WB5SXK, Bill to go to the Mississippi Queen to tell the Captain what had happened to his passengers. There were no telephones on the boat. Bill stayed there on the bridge until Frank and I arrived back on the boat after all the excitement was over. (By the way, Frank had to pay \$3.00 to get in the gate behind the emergency vehicles to get to where I was. (The Park Service is not wasting the taxpayer's money by letting any of it get away.) Colleen and a friend that was slightly injured went to the hospital with the fire chief in his car, and rode back with him to the boat.

A Ham went to each hospital to stand by if needed. I do not have their calls, but their services were appreciated just the same. WB5RKT; Jack; and N5MHF, Joe helped with calls from me to the hospital after I got back on the boat which delayed its departure from 5:00 p.m. until about midnight to get as many people back on board as possible. They also offered their cars for use to take anyone back and forth to the hospitals as my wife was taking clothes from the boat to friends who were going to have to stay over in the hospitals while we went on with the tour, but the police did this for us very well.

Two local area TV stations interviewed me at the accident sight after all the passengers had been taken away, probably because no one else was left that was there when it happened. There was only one TV on the boat, so many of the accident victims that were not seriously injured gathered to watch the late news that night. Not one word was said about the Hams participation, and my interview was not shown. Only pictures of the bus and the injured were shown. So what's new. Hams never get much credit from the local media!

At least my wife was a little glad that I had my HT with me this time, as she inherited the job as tour director for the rest of the trip from Marge who was one of the more seriously injured and she and George (who was not seriously injured) stayed behind in Vicksburg Hospital for about 10 days before coming home. Colleen shuttled back and forth from the boat to the two hospitals in police cars along with George and a man from the boat. She said she believed local persons on the streets thought she was "one of the girls" that had been picked up by the police along with her male companions!

Our next stop was Natchez where we found that our call was instantly recognized as they had been listening the day before to the happenings in Vicksburg. N5SCM, Ralph helped my wife with a message back to Vicksburg Hospital to Marge. Our group did get to complete their bus tour this time. We had our same driver that was on the bus that did not overturn. This made us feel secure and we enjoyed visiting the old ante bellum mansions that survived the war because there was no battle at Natchez. The people there told the Yankees to take whatever they wanted, but to spare their homes, and they did for the most part. We did see pictures of the bus accident and a write up in the Jackson paper while in Natchez. Again Hams were not ever mentioned!

However, I would say thanks to all the Hams of Vicksburg; Jackson, and Natchez, and in my opinion the **second** battle of Vicksburg was won by the hospitality of the Mississippi Hams and their local Vicksburg police and fire and ambulance services. No one could have been any nicer so whether you go to Vicksburg on your vacation; or to some other exciting place, take your HT with you, whether your wife likes it or not. You never know when you might need it!

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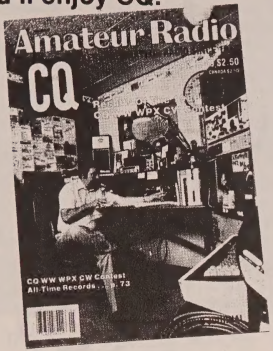

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A Spot For A Hamfest!

— Harry Simpson W4MI

Do I need to qualify myself? Go back a few years to the formative period of this organization and this publication. For several months I wrote a column called, **"Old Memphis By An Old Memphis Ham"**, or something like that. Well, I'm older; and so is the town. However, like a lot of things, the town doesn't really get older - it just gets better. Let me give you a few reasons why you should visit Memphis in October.

I won't bore you with Graceland, Elvis sightings and stories of his planes, cars and studios. I will simply say that Memphis is beautiful in October, and a wonderful place to visit. Oktoberfest is a great experience, and so is the Pink Palace Crafts Fair. Come to think of it, the Pink Palace Museum is an outstanding attraction by itself - a beautiful building which started out as a home for Clarence Saunders, owner of the first large grocery chain, Piggly Wiggly Stores. When he lost his chain and his money, Memphis inherited the estate.

Mud Island is no longer muddy. It now houses a $63 million entertainment/museum/dining complex. It includes a four-block long working model of the Mississippi River, a River Museum which contains full-scale replicas of river steamboats and Civil War gunboats. It also boasts an ampitheatre which hosts big name stars.

The Peabody Hotel, built in 1927 as "the South's Finest and one of America's Best", was completely renovated a few years ago at a cost of several million dollars. It has scores of activities and many restaurants, but its most prominent feature are the ducks which swim in the marble fountain, and march into and out of the lobby each day.

Under construction in the downtown area is a magnificient pyramid, three hundred feet tall, which will contain theatres, a 25,000 seat arena; a museum, a Hard Rock Cafe, and all kinds of goodies designed to entertain you.

There are several art galleries, a Victorian Village, with homes dating back to the mid-1800's, Beale Street, Libertyland, Overton Square, and of course, river rides on the Memphis Queen. There are over 200 parks and 23 community centers. There are nature trails and nature centers, and beautiful Shelby Forest State Park. Chucalissa Indian Village is another outstanding attraction which you will enjoy.

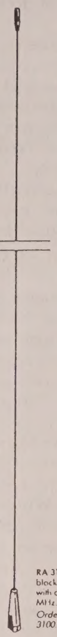
Memphis is in the bottom left-hand corner of Tennessee, it covers 290 square miles and is only a few minutes from Arkansas and Mississippi. One of the facts that I find fascinating is that there are seven state universities nearer to Memphis than our own University of Tennessee (that includes the University of Illinois in Champaign)!

Most of you are familiar with Memphis State University, a perennial finalist (and usually loser) in NCAA basketball tournaments. The football team fell on hard times and NCAA sanctions, but it shall rise again, under new management. The Memphis Chicks play baseball in Tim McCarver Stadium. Tim is an ex-Chick, an ex-St. Louis Cardinal, and was just appointed baseball analyst for Brent Musberger and CBS.

In passing, I might mention that the Memphis Area Hamfest and Computer Show; MEMFEST '89, will be held at the Memphis Fairgrounds on Saturday and Sunday, October 14 and 15, and you are cordially invited. I have only a couple of incidental interests in this affair - I was appointed chairman, and the capable co-chairman is none other than SERA's Vice-President Nita Wofford N4DON! Come watch us grow!

Nita Wofford, N4DON, Vice-President of SERA and also this year's Vice-Chairman of the upcoming October Memphis (TN) Hamfest, displays their hamfest flyer. The flyer has a reproduction of one of the famous bridges in the Memphis area, spanning tributaries of the Mississippi River. A picture of the same bridge hangs over Nita's head. (Photo by. Johnny Wofford)

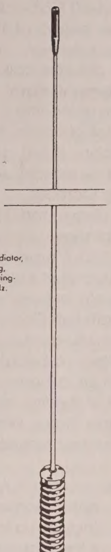
Mobile Antennas



RA 3100. Steel radiator, black, conical, supplied with cutting-chart 68–175 MHz.
Ordering Nr.
3100.03.00.00

RA 351. Steel radiator, black, 5/8-wave, supplied with cutting-chart 144–174 MHz.
Ordering No
351.04.00.00

Same as above but in glassfibre
Ordering No.
351.03.00.00



RA 310. Steel radiator, bright, with spring, supplied with cutting-chart 68--175 MHz.
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310.05.00.00

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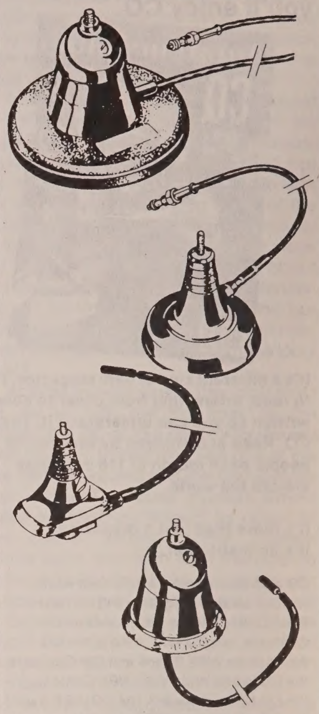

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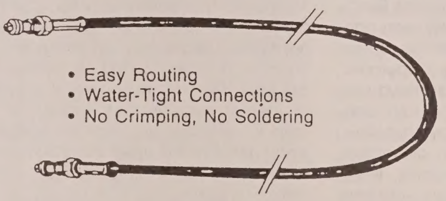

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The SERA By-State, By-City Index Appears After This By-Frequency Index

This by-frequency index contains repeaters in the States of: Virginia, North Carolina, South Carolina, Kentucky, Tennessee, West Virginia and Georgia.

2 METERS

4.51 /5.11	VTA	ATLANTA	GA
	TUN	AUGUSTA	GA
	RXG	SAURATOWN MT	NC
	JMT	CONWAY	SC
	BOX	JACKSON	TN
	IJL	KNOXVILLE	TN
	ARK	NASHVLE/FAIRVIEW	TN
	YPE	RICHMOND	VA
	MCR	SALT ROCK	WV
4.53 /5.13	SEX	NEWNAN	GA
	VLP	VALDOSTA/TIFTON	GA
	YNF	AHOSKIE	NC
	CS	GREENWOOD/HODGES	SC
	CMY	CHATTANOOGA-RTTY	TN
	YGI	COLLIERVILLE	TN
	OAK	LAFOLLETTE	TN
	VL	GALAX/LKOUT MT	VA
	FHE	BUCKHANNON	WV
4.55 /5.15	IWZ	PIKEVILLE	EKY
	MM	ALBANY	GA
	AQL	ATLANTA	GA
	LI	MILLEDGEVILLE	GA
	UDS	MORENTN/HI PK	NC
	CVM	RANDLEMAN/GBO	NC
	LWY	SUMMERTON	SC
	RJC	DECATUR-PONE KB	TN
	JXI	MEMPHIS	TN
	ARO	PETERSBURG	VA
	HDB	MARMET/BEE MT	WV
	FSE	MARTINSBURG	WV
4.57 /5.17	JBF	COOLIDGE	GA
	DIW	JONESBORO	GA
	ZQB	NEWTON/ANDSN MT	NC
	EKK	OXFORD	NC
	SK	LOUDON	TN
	BRN	MEMPHIS	TN
	LHO	MURFREESBORO	TN
	ZUA	NORFOLK	VA
	FRV	BOLT	WV
4.59 /5.19	GIS	CARTERSVILLE	GA
	ULJ	PINE MT/HAMILTON	GA
	BVW	MT MITCHELL	NC
	OTT	CARTHAGE	TN
	XX	JASPER	TN
	FAX	RICHMOND	VA
	YJJ	RICHWOOD	WV
	JGY	WHEELING	WV
4.61 /5.21	U	DEANE	EKY
	PSZ	TYRONE	GA
	ITL	TRENTON	NC
	NEP	GASTON	SC
	BBB	KNOXVILLE	TN
	CGD	NASHVILLE	TN
	LIY	TRENTON	TN
	MS	KILMARNOCK	VA
	QOJ	ROANOKE/POOR MT.	VA
	FEQ	HUNTINGTON	WV
4.63 /5.23	PPM	MIDDLESBORO	EKY
	COL	AUGUSTA/GRNS CUT	GA
	JEH	CONYERS	GA
	UJ	DALTON	GA
	COL	WAYNESBORO	GA
	BFB	CHARLOTTE	NC
	RA	LAVERNE	TN
	DBB	BEDFD/APL ORCH	VA
4.65 /5.25	BLQ	CLAYTON	GA
	BZJ	DALTON	GA
	KQK	FOREST PARK	GA
	GGD	GREENSBORO	NC
	URP	CHARLESTON	SC
	SBX	GRAY	TN
	DRL	MEM/FISHERVILLE	TN
4.67 /5.27	PN	WALESKA/PNLGMT	GA
	KNI	HENDSVL/BERWLW M	NC
	BEA	RALEIGH	NC
	WZK	HENDERSONVILLE	TN
	CJX	SEV/SHIELDS MT	TN
	JCE	MANASSAS	VA
	VR	WYTHEVL/SAND MT.	VA
	OG	CRAIGSVILLE	WV
4.69 /5.29	ICN	PRESTONSBURG	EKY
	DRQ	ATLANTA	GA
	BFB	CHARLOTTE	NC
	ACP	MAYODAN	NC
	VCM	CHATTANOOGA	TN
	SQC	HOLSTON MT/E TN	TN
	WF	NASHVILLE	TN
	NDH	CHESAPEAKE	VA
4.71 /5.31	CEK	COLUMBUS	GA
	JDR	STOCKBRIDGE	GA
	ICX	LEXINGTON	NC
	PF	ROCK HILL	SC
	GRC	ATHENS	TN
	SC	JACKSON	TN
	FSC	ALEXANDRIA	VA
	BZS	BECKLEY	WV
4.73 /5.33	OGE	JONESBORO	GA
	J	MT. AIRY	NC
	DFP	BAMBERG	SC
	GMT	CUMBERLAND CITY	TN
	TEM	KNOXVILLE	TN
	QQI	FARMVILLE	VA
	QC	PARSONS	WV
	FR	WILLIAMSON	WV
4.75 /5.35	R	HARLAN	EKY
	DOC	ATLANTA	GA
	FGQ	ROSSVILLE	GA
	AOS	CHARLOTTE	NC
	GVK	GREENVILLE	NC
	Y	HUMBOLDT	TN
	JYD	NASHVILLE	TN
	AZJ	BLAND	VA
	AQD	FALLS CHURCH	VA
4.77 /5.37	UA	AUGUSTA	GA
	ACH	COLUMBUS-RTTY	GA
	IZF	JASPER	GA
	AGN	N. WILKESBORO	NC
	PPD	SHALLOTTE	NC
	GRC	KNOXVILLE	TN
	OG	NASHVILLE	TN
	P	GLOUCESTER	VA
	FWL	BECKLEY/EOC	WV
4.79 /5.39	HYB	GRIFFIN	GA
	NJ	MONROE/UCARS	NC
	AM	CHATTANOOGA	TN
	EPC	GREENEVILLE	TN
	DOR	HERMITAGE	TN
	VM	SELMER	TN
	ZIV	GALAX	VA
	EOM	WESTON	WV
4.81 /5.41	PME	ATLANTA/BELL	GA
	PXX	BRUNSWICK	GA
	XO	HIGH POINT	NC
	KNU	WILLIAMSTON	NC
	TUO	GREENEVILLE	TN
	VIP	MEMPHIS	TN
	FHE	BUCKHANNON	WV
	BHP	LIBERTY	WV
4.83 /5.43	LCI	ATLANTA/SWEAT MT	GA
	OLL	MACON	GA
	ITL	SPARTA/GREEN MT	NC
	LB	COLUMBIA	SC
	YTU	BROWNSVILLE	TN
	UCE	COOKEVILLE	TN
	IIA	KNOXVILLE	TN
	SQT	RICHMOND	VA
	WHQ	CHARLESTON	WV
	LG	MORGANTOWN	WV
4.85 /5.45	TX	LEXINGTON	EKY
	BOC	DECATUR	GA
	PLY	CROWDERS MT	NC
	WTX	DURHAM	NC
	GRW	NEWPORT	NC
	SIR	BENTON	TN
	KO	COLUMBIA	TN
	HAZ	MEMPHIS	TN
	E	SPRING HILL	TN
	FXC	GRANTSVILLE	WV
	SXZ	WELCH	WV
4.87 /5.47	WMM	WASHINGTON	EKY
	CLA	SWEAT MT/MARIETT	GA
	GIC	SAURATOWN MT	NC
	OXE	INMAN	SC
	GBI	KNOXVILLE	TN
	OMO	MOUNTAIN CITY	TN
	ARK	NASHVILLE	TN
	EFJ	ARLINGTON	VA
	FG	KINGSTON/LICK KB	WV
4.89 /5.49	JA	AUGUSTA	GA
	RWS	CORDELE	GA
	QPL	MARIETTA	GA
	ZCZ	FRANKLIN	NC
	BWC	RALEIGH	NC
	ABW	RKY RDG/WALLACE	SC
	KKO	MCMINVL/SHT MT	TN
	KOG	MEMPHIS	TN
	MOP	BLUEFIELD	VA
	OHX	NEWPORT NEWS	VA
	MOP	BLUEFIELD	WV
6.895/6.295	T	HARTWELL	GA
	SM	MACON	GA
6.01 /6.61	CVY	COLUMBUS	GA
	BDP	WARNER ROBINS	GA
	SNI	GREENSBORO	NC
	JMS	NEW BERN	NC
	NYK	GRNVLE/CSRS HD	SC
	CMY	CHATTANOOGA	TN
	PCD	NASHVILLE	TN
	LSP	ABINGDN/BRMLY MT	VA
	GSP	CHESAPEAKE	VA
	WWQ	LYNCHBURG	VA
	MZI	GASSAWAY	WV
6.025/6.625	UPE	UNION CITY	GA
	JWP	VIDALIA	GA
	QWK	LAURINBURG	NC
	GBI	KNOXVILLE	TN
	ZQX	MARTIN	TN
	AVW	NEW MARKET	VA
	BZS	WINTERPL/FLT TOP	WV
6.04 /6.64	YZY	PINEVILLE	EKY
	LWT	AUGUSTA	GA
	FWD	CARROLLTON	GA
	GVG	WAYCROSS	GA
	YAO	HENDERSONVILLE	NC
	DW	RALEIGH	NC
	GIC	WINSTON-SALEM	NC
	FIQ	SUMTER	SC
	RX	CROSSVILLE	TN
	KQQ	MEMPHIS	TN
	NTM	NASHVILLE	TN
	WIC	FINCASTLE	VA
	IH	MARION	VA
	QEY	RICHMOND	VA
	EZR	HUNTINGTON/CHAS	WV
6.055/6.655	NFP	ATLANTA/MARIETTA	GA
	CEB	CONCORD/KANNAP.	NC
	VTX	ELIZABETH CITY	NC
	ABU	BROWNSVILLE	TN
	F	CHATT/SIGNAL MT	TN
	PDP	ALEXANDRIA	VA
	ISI	ALTAVISTA	VA
6.06 /6.66	BKM	MACON	GA
6.07 /6.67	VHF	HAZARD	EKY
	NSO	GAINESVILLE	GA
	EQL	JESUP	GA
	YGD	BURLINGTON	NC
	BKU	CHERRY MT	NC
	SJ	HALIFAX	NC
	U	ST. MATTHEWS	SC
	ILW	BRISTOL	TN

This Index Continues on Next Page.

SERA Suggested FM Simplex

146.490 146.505 146.520 146.535 146.550
146.575 146.580 146.595 147.510 147.525
147.540 147.555 147.570 147.585
223.50 or up and down 20 khz channels
446.00 or up and down 25 khz channels

SERA Suggested Digital Simplex

145.01 145.05 145.07 145.09 145.61
145.63 145.65 145.67 145.69
221.05 221.15 221.25 221.35 221.45
223.40 223.42 223.58

NOTE: Digital operators are reminded to check with local Digital Societies for which digital channels are available for various digital usage, in their particular area. Some channels are for exclusive use of LAN or BBS, etc. usage.

PLEASE NOTE!

A column with letters of the alphabet between the frequency and city columns indicate suffixes of the repeater callsigns.

REPEATERS BY FREQUENCY CONTINUED

	BGW	LAFOLLETTE/WMT	TN
	NTM	NASHVILLE S.W.	TN
	HZS	BARREN SPRINGS	VA
	ZR	LEXINGTON	VA
	NTG	WILLIAMSBURG	VA
	JNU	RAVENSWOOD	WV
6.085/6.685	IWL	ADAIRSVILLE	GA
	UWN	FAYETTEVILLE	GA
	NBR	GRIFTON	NC
	O	STATESVILLE	NC
	CO	NEWBERRY	SC
	PIO	LENOIR CITY	TN
	Q	WAVERLY	TN
	HTA	VIENNA	VA
	FMD	CLARKSBURG	WV
6.10 /6.70	JO	GRAYSON	EKY
	MM	ALBANY	GA
	OOM	JASPER	GA
	DOJ	MILLEDGEVILLE	GA
	TO	SAVANNAH	GA
	CID	DUNN	NC
	PAX	LANCASTER	SC
	UOT	MANCHESTER	TN
	UFT	MEMPHIS	TN
	YGM	UNION CITY	TN
	WQS	DANVILLE/WHT OAK	VA
	D	NORFOLK	VA
	LQC	PENNINGTON GAP	VA
	XD	STAUNTON	VA
	JNU	RAVENSWOOD	WV
6.115/6.715	ABZ	RINGGOLD	GA
	GGN	MILLERS CREEK	NC
	KDC	SPRING LAKE	NC
	NEP	COLUMBIA	SC
	I	BLACKSBURG	VA
	TXE	STERLING	VA
	GL	SHERRARD	WV
6.13 /6.73	SWF	LOUISA	EKY
	MM	ALBANY	GA
	NC	ATLANTA/SWEAT MT	GA
	TVE	BRUNSWICK	GA
	QHN	PHENIX CITY (AL)	GA
	BWC	RALEIGH	NC
	EXU	SALISBURY	NC
	VNK	WILMINGTON	NC
	FKJ	N. AUGUSTA	SC
	BJY	SIMPSONVILLE	SC
	IOB	KNXVL/ENG MT	TN
	DAZ	MEMPHIS	TN
	WA	WATERTOWN	TN
	DHO	HAMPTON	VA
	AVZ	ALDERSON	WV
6.145/6.745	BKF	ATHENS	GA
	N	DILLON/PEE DEE	SC
	HF	DYERSBURG	TN
	DY	ROANOKE/POOR MT	VA
	FMD	ELK GARDEN	WV
6.16 /6.76	BOC	STONE MT	GA
	APS	VALDOSTA	GA
	BVW	ASHVL/MT PISGAH	NC
	MSS	GREENSBORO	NC
	S	SWANSBORO	NC
	THL	WILSON	NC
	ILT	CHARLESTON	SC
	LSP	BRISTOL/HLSTN MT	TN
	PQP	NASHVILLE	TN
	TFZ	CHARLOTTESVILLE	VA
	ZIN	WILLIAMSBURG	VA
	VA	HUNTINGTON	WV
	CUL	MORGANTOWN	WV
	JDH	WHEELING	WV
6.175/6.775	KE	MARIETTA	GA
	OCB	WRENS	GA
	BFB	CHARLOTTE/RTTY	NC
	JYH	LONG BEACH	NC
	DCD	TABOR CITY	NC
	JVO	PULASKI/MUSIC MT	TN
	MUQ	WYTHEVILLE	VA
	BWZ	ELKINS	WV
6.19 /6.79	U	PAINTSVILLE	EKY
	DMK	FOLKSTON	GA
	KOW	MOULTRIE	GA
	SEX	NEWNAN	GA
	VYX	SWAINSBORO	GA
	LZD	CLINTON	NC
	ODK	SAURATOWN MT	NC
	FVV	ANDERSON/SAS MT	SC
	ILT	CHARLESTON	SC
	AM	CHATTANOOGA	TN
	ABR	JOHNSON CITY	TN
	SQE	NASHVILLE	TN
	SD	CHESAPEAKE	VA
	LBL	FAIRFAX	VA
	OQC	OAK HILL	WV
6.205/6.805	NNE	GUTHRIE	EKY
	LT	MILLEDGEVILLE	GA
	EWG	FAYETTEVILLE	NC
	NOQ	GASTONIA	NC
	NNE	GUTHRIE (TN/KY)	TN
	HTI	COVINGTON	VA
7.405/6.805	AQS	CALHOUN/JASPER	GA
	AQS	JASPER/MT OGLTHP	GA
	HCY	MAGGIE VALLEY	NC
6.22 /6.82	MM	ALBANY	GA
	DOC	ATLANTA	GA
	HAO	LYONS	GA
	PZA	ROARING GAP	NC
	GMP	WILMINGTON	NC
	NYK	GRNVLE/PARIS MT	SC
	OAH	LAKE CITY	TN
	BS	MEMPHIS	TN
	NCM	WINCHESTER	TN
	RKC	WINCHESTER	VA
	IFS	CHARLESTON	WV
6.235/6.835	OCB	THOMPSON	GA
	QCO	ASHEVILLE	NC
	JXG	NAGS HEAD/BODIE	NC
	IAT	WADESBORO	NC
	DCX	GRUNDY/BIG A MT	VA
7.435/6.835	BPV	HIGH POINT	NC
6.25 /6.85	IXA	PIKEVILLE	EKY
	DVJ	DALLAS	GA
	R	LAGRANGE	GA
	HON	WARNER ROBINS	GA
	CYP	GOLDSBORO	NC
	MDW	HICKORY/BRT. MT	NC
	YFT	REIDSVILLE	NC
	ULH	FLORENCE	SC
	KJH	GTLBG/COVE MTN	TN
	KOG	MEMPHIS	TN
	PCD	NASHVILLE	TN
	POX	PORTSMOUTH	VA
	ZBP	STAUNTON	VA
	BO	BECKLEY/FLAT TOP	WV
	L	BUCKHANNON	WV
6.265/6.865	DKY	MADISON	GA
	YF	BIG KNOB/GREY CT	SC
	G	FAYETTEVILLE	TN
7.465/6.865	ZRS	WAXHAW	NC
	MZ	MOUNTAIN LAKE	VA
6.28 /6.88	U	MAYTOWN	EKY
	TOM	COLUMBUS	GA
	YFR	MARIETTA	GA
	NKL	QUITMAN	GA
	HBB	SAVANNAH	GA
	TQD	RALEIGH	NC
	NYR	SHELBY	NC
	AVU	COLUMBIA	SC
	CYZ	BRISTOL	TN
	ETE	MEMPHIS	TN
	TOA	NASHVILLE	TN
	SKH	OAK RIDGE	TN
	CYZ	BRISTOL	VA
	ZBE	RICHMOND	VA
	PDL	SALEM	VA
	CQV	CHARLESTON	WV
6.295/6.895	YFF	MADISON	NC
	KXV	VIRGINIA BEACH	VA
6.30 /6.90	SP	FAIRMONT	WV
6.31 /6.91	GFY	MOREHEAD	EKY
	FOW	CLEVELAND/LONG	GA
	HYB	GRIFFIN	GA
	ZGQ	AHOSKIE	NC
	MOE	ASHVL/SPIVEY MT	NC
	YZF	FAYVLLE/CFARS	NC
	IZM	LEXINGTON	NC
	BWZ	WHITE HALL	SC
	GZX	CLEVELAND	TN
	DQU	SAVANNAH	TN
	YXA	SHORT MTN	TN
	AXH	CHASE CITY	VA
	TUE	MT.LAKE/BALD KNB	VA
	FMD	TYSONS CORNER	VA
	ULB	MCMECHEN	WV
6.325/6.925	ASI	COVINGTON	GA
	PJR	JESUP	GA
	TFZ	CHARLOTTESVILLE	VA
	GJG	DANVILLE(DCC)	VA
	OGY	PRINCETON/PIPEST	WV
6.34 /6.94	SN	ASHLAND	EKY
	N	AUGUSTA	GA
	VO	ROME/MT. ALTO	GA
	RVB	WRIGHTSVILLE	GA
	DLH	BURGAW	NC
	BFB	CHARLOTTE	NC
	BFT	DURHAM	NC
	ACY	MANTEO/WANCHESE	NC
	ZAS	MT AIRY-RTTY	NC
	GY	CHELSEA	SC
	IQQ	GREENVILLE	SC
	GBI	KNOXVILLE	TN
	BN	MEMPHIS	TN
	PCD	NASHVILLE	TN
	UMI	HAMPTON	VA
	ZA	RICHMOND	VA
	AP	ROANOKE	VA
	VKB	SUMMERSVILLE	WV
	JN	WEIRTON	WV
7.54 /6.94	CSW	NEW MARTINSVLLE	WV
6.355/6.955	KIN	PERRY	GA
	PRE	ROCKY TOP MT	GA
	ULA	ROCKINGHAM	NC
	MZ	ONEIDA PEAK/BLF	VA
6.37 /6.97	OD	ATLANTA	GA
	HBB	SAVANNAH	GA
	ZAS	MT AIRY	NC
	JQ	SMITHFIELD	NC
	SZ	ANDERSON	SC
	ISM	FLORENCE	SC
	TRC	KNGSPT/BAYS MT	TN
	MWQ	MCMINNVILLE	TN
	BEZ	MEDINA	TN
	SKH	OAK RIDGE	TN
	FPM	MANASSAS	VA
	WRN	MIDDLEBROOK	VA
	KXV	VIRGINIA BEACH	VA
	E	LOGAN/WARD RK MT	WV
	CRW	PARKERSBURG	WV
6.385/6.985	I	AUGUSTA	GA
	HHH	ELLIJAY/TALONA M	GA
	TOV	PRESTON	GA
	UUB	ST. MARYS	GA
	OGB	ALBEMARLE	NC
	PVE	MARION	NC
	ESG	MT PLEASANT	SC
	CA	ROANOKE/POOR MT	VA
	EIV	CHARLES TOWN	WV
6.40 /7.00	NNO	ATLANTA	GA
	AZA	HIGH POINT	NC
	FVO	JACKSONVILLE	NC
	YLT	MARION	SC
	YXZ	PICKENS	SC
	FZJ	MEMPHIS	TN
	HMT	SUFFOLK/GASBURG	VA
	GDY	ST ALBANS	WV
7.60 /7.00	WAU	ELKHORN CITY	EKY
	DXZ	LANETT(AL)	GA
	KMG	BLOUNTVILLE	TN
	ZOK	CHATT/SIGNAL MT	TN
	SGA	CLARKSVILLE	TN
	ZR	TERRA ALTA	WV
6.415/7.015	M	LYNCHBURG	VA
	AXO	NORTON/HIGH KNOB	VA
7.615/7.015	MST	BONAIRE	GA
	FOW	CLEVELAND/LONG	GA
	UM	HINESVILLE	GA
	KPF	LK NORMN/CLT	NC
	UMU	SUMTER	SC
	JVV	LEBANON	TN
	RHV	ROCKWOOD	TN
	YGM	UNION CITY	TN
	LNT	FREDRICKSBURG	VA
6.43 /7.03	YTZ	ROCK HILL	SC
	MVR	LEXINGTON	TN
	ZJM	MEMPHIS	TN
	ODR	MILLINGTON	TN
	JST	RICHMOND	VA
7.63 /7.03	REI	ATLANTA/AIRPORT	GA
	GG	GREENSBORO	NC
	DTS	ROANOKE RAPIDS	NC
	FOF	BARNWELL	SC
	HOG	N. MYRTLE BEACH	SC
	NIQ	FAYETTEVILLE	TN
	PRQ	MORRISTOWN	TN
	BLD	WAYNESBORO	VA
	IT	MULLENS	WV
	ECC	ST MARYS/BENS R	WV
6.445/7.045	FLR	FAYETTEVILLE	NC
	CNS	ROB/JOANNA BLD	NC
	YVM	ARLINGTON	VA
7.645/7.045	TYM	METTER	GA
	FAD	WATKINSVILLE	GA
	JRL	STATSVL/ASBRY MT	NC
	HKZ	COOKEVILLE	TN
	AYN	NASHVILLE	TN
	RAG	STAUNTON/EL. KB	VA
	SBC	VIRGINIA BEACH	VA
6.46 /7.06	CQ	CHARLOTTE	NC
	TJY	KNOXVILLE	TN
	LBM	VOLENS	VA
	PNC	PRINCETON	WV
7.66 /7.06	DDI	MACON	GA
	CLA	ROSWELL	GA
	UCJ	THOMASVILLE	GA
	LED	MACO	NC
	VFR	SUMTER/SHAW	SC
	MQQ	MEMPHIS	TN
	QEB	SHELBYVILLE	TN
	ECM	CHESTERFLD CO	VA
	KNM	POINT PLEASANT	WV
6.475/7.075	VGZ	BURLINGTON	NC
7.675/7.075	JXR	SNELLVILLE	GA
	HBQ	BURLINGTON	NC
	L	NEWTON	NC
	GBI	KNOXVILLE	TN
	PNT	WAYNSBR/BEAR DEN	VA
7.69 /7.09	YK	PHELPS	EKY
	CVE	ST SIMONS ISL	GA
	GDF	GREENVL/ESTN NC	NC
	RDN	ORANGEBURG	SC
	JLA	SPARTANBURG	SC
	ATI	GERMANTOWN	TN
	BSA	SPARTA/BON AIR	TN
	VL	GALAX/BRIRP MT	VA
7.705/7.105	YSB	ATLANTA	GA
	D	STATESBORO	GA
	JCK	MONROE	NC
	GHH	MOUNTAIN HOME	NC
	TC	HENDERSON	TN
	JBJ	BEDFORD	VA
	JTH	MT STORM	WV
	APG	SPENCER	WV
6.09 /7.11	LZR	LOGAN	WV
7.72 /7.12	ASZ	WINCHESTER	EKY
	MM	ALBANY	GA
	S	AUGUSTA	GA
	CMA	CEDARTOWN	GA
	REW	GAST/SPCR MT	NC
	IKY	GIBSONVILLE	NC
	EWL	ROCKY MOUNT	NC
	JMT	MYRTLE BEACH	SC
	GMV	MEMPHIS	TN
	EAJ	OAK RIDGE	TN
	FAF	CULPEPER	VA
	DKM	BRIDGEPORT	WV
	H	HORSEPEN MT	WV
7.735/7.135	BZJ	DALTON	GA
	Y	VALDOSTA	GA
	CJS	BREVARD/RICH MTN	NC
	ABW	CHERAW	SC
	EDS	ALAMO	TN
	AZJ	PEARISBURG	VA
	HB	RICHMOND	VA
7.75 /7.15	TFW	ALBANY	GA
	BYK	CUMMING/SAWNEE	GA
	VLY	MORGANTON	NC
	TQD	RALEIGH	NC
	BJM	MONCKS CORNER	SC
	SDT	SIMPSONVILLE	SC
	PCD	NASHVILLE	TN
	EAJ	OAK RIDGE	TN
	QKH	TAZEWELL	VA
	SVR	ST ALBANS	WV
7.765/7.165	MWA	DICKS KNOB	EKY
	TCU	DOUGLAS	GA
	RIS	HIGH POINT	NC
	VIA	GREENWOOD	SC
	CEX	PURYEAR	TN
	CTF	NEWPORT NEWS	VA
	FJT	WARRENTON	VA
7.78 /7.18	BMA	AUGUSTA	GA
	NHW	BALDWIN	GA
	BI	SYCAMORE	GA
	EJJ	SANFORD	NC
	CTJ	WILMINGTON	NC
	NAT	DORCHESTER	SC
	SC	FT MILL/CAROWND	SC
	KOG	MEMPHIS	TN
	PCD	NASHVILLE	TN
	DES	POLK CTY/OSWALD	TN
	Z	PKS KB/PULASKI	VA
	NMT	LEON	WV
7.795/7.195	SMX	ATLANTA	GA
	RD	CAIRO	GA
	NIN	LENOIR	NC
	WB	MURPHY	NC
	RTS	LYNCHBURG	VA
7.81 /7.21	SG	CONYERS	GA
	LN	DALTON	GA
	TO	SAVANNAH	GA
	BUZ	GREENSBORO	NC

This Index Continues on Next Page.

REPEATERS BY FREQUENCY

	MSD	WHITEVILLE	NC
	AVU	LITTLE MT.	SC
	WS	COOKEVILLE	TN
	WKZ	JACKSON	TN
	IWG	MCLEAN	VA
	TC	CHARLESTON	WV
7.825/7.225	ZUN	JEFFERSON	GA
	LVY	SUMMERVILLE	GA
	WTX	HILLSBOROUGH	NC
	DTW	SANTEE	SC
	OAH	MORRISTOWN	TN
	C	HARRISONBURG	VA
	SDC	YORKTOWN	VA
	NRK	PRINCETON	WV
7.84 /7.24	DII	ASHLAND	EKY
	NFG	IRWINTON	GA
	NIW	CARTHAGE	NC
	ACP	EDEN	NC
	PBG	FOREST CITY	NC
	GHZ	FRANKLIN	NC
	BAL	HILTON HEAD	SC
	AC	LANCASTER	SC
	BKY	GALLATIN	TN
	OG	LUNENBURG CT.HSE	VA
	FQR	WOODBRIDGE	VA
7.855/7.255	KDT	ATLANTA	GA
	AV	ASHEBORO	NC
	KNI	HENDSVL/PENIC/MT	NC
	SI	PETROS	TN
	TVS	ACCOMAC	VA
	CYZ	DANTE	VA
	VAZ	MARTINSBURG	WV
7.885/7.255	BZU	DONELSON	TN
7.87 /7.27	GEL	PIKEVILLE	EKY
	VBH	AMERICUS	GA
	H	BENSON	NC
	SM	WAYNESVILLE	NC
	LET	CHARLESTON	SC
	JRJ	SENECA/LONG MT	SC
	BKY	GALLATIN	TN
	FH	JOHNSON CITY	TN
	OWI	MEMPHIS	TN
	TMC	PINSON	TN
	GX	GUM SPRING	VA
	BHP	SCOTT DEPOT/COAL	WV
7.885/7.285	EVD	ASHBURN	GA
	VBX	ATLANTA/GPCO	GA
	ADM	AIKEN	SC
	DCD	MYT BEA/BRKSVLLE	SC
	MGM	ROCKY SPUR	SC
	MJM	PIKEVILLE	TN
	L	MARTINSVILLE	VA
	HON	SPRUCE KNOB	WV
7.90 /7.30	U	SALYERSVILLE	EKY
	ACY	PERRY	GA
	HNM	ROME	GA
	YJG	JEFFERSON	NC
	MZP	RED SPRINGS	NC
	OMV	TUCKASEGEE	NC
	LWS	MT. PLEASANT	SC
	BBB	KNOXVILLE	TN
	ADT	MEMPHIS	TN
	ZSA	NASHVILLE	TN
	SPS	FRANKLIN	VA
	ZR	LEXINGTON	VA
	TSC	WINCH/BLUEMONT	VA
	NSL	HARRISVL/PENSBRO	WV
7.915/7.315	REB	TWIN CITY	GA
	RBW	WALKERTOWN	NC
	HFH	ALEXANDRIA	VA
	MR	CLARKSBURG	WV
7.92 /7.32	HWQ	GRUNDY	VA
7.93 /7.33	KWH	ASHLAND	EKY
	KNE	MT. STERLING	EKY
	BXO	LAGRANGE	GA
	DIP	TOCCOA	GA
	LPL	FAYVLLE/FT BRAGG	NC
	K	LENOIR/HIBRITN	NC
	NUY	COLUMBIA	SC
	VXW	COVINGTON	TN
	CV	CROSSVILLE	TN
	AJS	NASHVILLE	TN
	PQD	LEXNGTN/ROCK MT.	VA
	ZIP	WARSAW	VA
7.94 /7.34	NEQ	ATLANTA/MARIETTA	GA
7.945/7.345	IZD	LYNCH/BLACK MT	EKY
	NYR	SHELBY	NC
	TEP	WASHINGTON	NC
	WF	HENDERSONVILLE	TN
	SJM	GLADYS	VA
	RUA	FRANKLIN	WV
	K	LOGAN/SUMERCO	WV
7.96 /7.36	EO	DOUGLASVILLE	GA
	HZX	DUBLIN	GA
	KDE	BOONE/RICH MTN	NC
	LDB	DURHAM	NC
	Z	LUMBERTON	NC
	OAK	KNXVL/CROSS MT	TN
	MMI	MEMPHIS	TN
	NTM	NASHVILLE S.	TN
	KLX	PARIS	TN
	MMI	POCAHONTAS	TN
	CBB	CHESTERFIELD	VA
	OLM	STUARTS DRAFT	VA
7.975/7.375	TQU	ATHENS	GA
	VEK	LAFAYETTE	GA
	YN	BURNSVILLE	NC
	ROK	GREENVILLE	NC
	DMI	GEORGETOWN	SC
	LEO	GREENVILLE	SC
	ILD	LYNCHBURG	VA
	NV	VIRGINIA BEACH	VA
	LNB	GRAFTON	WV
	WMX	ST ALBANS	WV
7.99 /7.39	PDJ	JENKINS	EKY
	IMK	THOMASTON	GA
	CHZ	AQUADALE	NC
	PLY	CHARLOTTE	NC
	QBG	EDEN/STONEVILLE	NC
	FAU	SHALLOTTE	NC
	FEC	LEXINGTON	SC
	TA	CLARKSVILLE	TN
	DRL	COVINGTON	TN
	ZLA	DAYTON/RHEA CTY	TN
	SBX	GRAY	TN
	AJO	MADISON	VA
	ARO	PETERSBURG	VA
	CRW	PARKERSBURG	WV
6.835/7.435	EV	DALONEGA	GA
6.19 /7.51	HBY	MEMPHIS	TN
7.315/7.915	SPJ	FORSYTH	GA

220 MHZ

3.40 /CAE22	EOY	COLUMBIA	SC
	B	GREY COURT/GRNVL	SC
	WJR	LANCASTER	SC
1.01 /PKET	KXV	VIRGINIA BEACH	VA
3.70 /PKET	GQX	SAWNEE MT/CUMMIN	GA
1.01 /ROA22	QOJ	ROANOKE/POOR MT.	VA
0.058/0.058	NKM	GREENEVILLE	TN
3.94 /2.34	DBB	BEDFD/APL ORCH	VA
3.50 /3.50	TFZ	CHARLOTTESVILLE	VA
2.12 /3.72	KHP	STERLING PARK	VA
2.30 /3.90	NSO	GAINESVILLE	GA
	RAB	HERMITAGE	TN
2.32 /3.92	AZA	HIGH POINT	NC
2.34 /3.94	QK	ASHLAND	EKY
	UPC	YORKVILLE	GA
	BVW	ASHVL/MT PISGAH	NC
	WTX	HILLSBOROUGH	NC
	GP	CLARKSVILLE	TN
	ZJM	MEMPHS/FRAYSER	TN
2.36 /3.96	C	ROCKY MOUNT	NC
2.38 /3.98	APS	VALDOSTA	GA
	HUV	LINWOOD	NC
	ILY	GREER	SC
	ZSA	GALLATIN	TN
2.40 /4.00	ZIA	LOCUST	NC
	HQ	DELTAVILLE	VA
2.42 /4.02	JEH	CONYERS	GA
	EHF	FAYETTEVILLE	NC
	MDW	HICKORY	NC
	TB	NASHVILLE	TN
2.44 /4.04	BZJ	DALTON	GA
2.46 /4.06	UPC	YORKVILLE	GA
	N	PICKENS/SASFR MT	SC
	BZS	FLAT TOP	WV
2.48 /4.08	GIS	CARTERSVILLE	GA
	CII	RIDGEVILLE	SC
	UEX	NASHVILLE	TN
2.50 /4.10	F	CORNELIA	GA
	YHD	FAIRFAX	VA
	DBB	ROANOKE	VA
2.52 /4.12	NFP	ATLANTA/MARIETTA	GA
	FEC	LITTLE MT	SC
	MEY	NASHVILLE	TN
2.54 /4.14	WOR	GREENSBORO	NC
	QHF	PICKENS/CSRS HD	SC
	SGS	FRANKLIN	TN
	YYW	WILLIAMSON	WV
2.56 /4.16	K	LENOIR/HIBRITN	NC
2.58 /4.18	YNY	RIEGELWOOD	NC
	DAS	VIRGINIA BEACH	VA
2.60 /4.20	UA	AUGUSTA	GA
	YTU	BROWNSVILLE	TN
	PEA	HAMPDEN-SYDNEY	VA
2.62 /4.22	ACP	MAYODAN MT	NC
	FZK	KNOXVILLE	TN
	AWB	NASHVILLE	TN
	EHB	SPRINGFIELD	TN
2.64 /4.24	KNI	HENDSVL/BERWLW M	NC
2.66 /4.26	NP	SHORT MTN.	TN
2.68 /4.28	BLR	ATLANTA	GA
	M	LYNCHBURG	VA
2.70 /4.30	PVI	STATESVILLE	NC
2.72 /4.32	JBF	THOMASVILLE	GA
	TEM	KNOXVILLE	TN
2.74 /4.34	DOC	ATLANTA	GA
2.76 /4.36	TYO	MARSHALL	NC
2.78 /4.38	RBT	CLEVELAND	GA
	GJG	DANVILLE	VA
2.80 /4.40	ZC	CHARLT/MINT HL	NC
	YGI	COLLIERVILLE	TN
2.82 /4.42	BS	MEMPHIS	TN
	KHP	FAIRFAX	VA
	NDQ	NORTON/HIGH KB	VA
2.84 /4.44	OG	NASHVILLE	TN
2.86 /4.46	YON	KNOXVILLE	TN
2.88 /4.48	QC	PARSONS	WV
2.90 /4.50	YNY	WILMINGTON	NC
	BBB	KNOXVILLE	TN
	DRL	MEM/FISHERVILLE	TN
	BVI	MARTINSVILLE	VA
2.92 /4.52	KSM	CANTON	GA
2.94 /4.54	BVW	MT MITCHELL	NC
2.96 /4.56	DOC	ATL/CHESTNUT MT	GA
2.98 /4.58	F	PIKEVILLE	EKY
	YHH	SAURATOWN MT	NC
	VFD	CROSS	SC
3.00 /4.60	N	ASHEVILLE	NC
	NNR	HIGH POINT	NC
3.02 /4.62	ETG	PIKEVILLE	EKY
	ZTL	ATLANTA/BELL	GA
3.04 /4.64	PEN	RALEIGH	NC
	YHH	WINSTON-SALEM	NC
	MQG	CHATTANOOGA	TN
3.06 /4.66	BKM	MACON	GA
	TYO	MARS HILL	NC
	MEY	NASHVILLE	TN
3.08 /4.68	KPF	LK NORMN/CLT	NC
3.18 /4.68	SLJ	DALTON	GA
3.10 /4.70	IOR	ATLANTA	GA
	RXG	SAURATOWN MT	NC
3.12 /4.72	MSK	MT. TOXAWAY	NC
	KHP	TYSONS CORNER	VA
3.14 /4.74	KVC	DALTON	GA
	FG	KINGSTON/LICK KB	WV
3.16 /4.76	BOC	STONE MT	GA
	EXU	SALISBURY	NC
	OAK	DAN/WHT OAK	VA
3.18 /4.78	VCM	CHATTANOOGA	TN
	UCI	JC/BUFFALO MT	TN
	KOG	MEMPHIS	TN
3.20 /4.80	PML	MORGANTON	NC
3.22 /4.82	C	ATLANTA	GA
	KQI	GREENSBORO	NC
	CCF	ALEXANDRIA	VA
3.24 /4.84	ACY	PERRY	GA
	DAN	GRIFTON	NC
	OG	NASHVILLE	TN
	PLV	BEDFORD	VA
3.26 /4.86	UHA	NEWPORT NEWS	VA
3.28 /4.88	RXG	SAURATOWN MT	NC
	DRL	FISHERVILLE	TN
3.30 /4.90	QPL	MARIETTA	GA
	EOY	COLUMBIA	SC
	ZOK	CHATT/SIGNAL MT	TN
3.34 /4.94	UPC	PINE LOG MT.	GA
	EV	ROSSVILLE	GA
	NKM	GREENEVILLE	TN
	PYI	NASHVILLE	TN
	GVC	CHESAPEAKE	VA
	DBB	ROANOKE/POOR MTN	VA
3.36 /4.96	UDS	CHERRYVILLE	NC
	JVX	GOLDSBORO	NC
	WTB	SAURATOWN MT	NC
	OLM	STUARTS DRAFT	VA
3.38 /4.98	JSR	CUMMING/SAWNEE	GA
	CHP	FALLS CHURCH	VA

440 MHZ

6.50 /ASH2	SN	ASHLAND	EKY
3.80 /PKET	KDC	NASHVILLE	TN
	CPF	SEWANEE	TN
	VVX	WAVERLY	TN
6.05 /PKET	BLD	WAYNESBORO	VA
6.075/PKET	IYV	WOODBRIDGE	VA
6.50 /PKET	SN	ASHLAND	EKY
9.45 /5.67	DOC	ATLANTA	GA
9.25 /1.25	KIP	ATLANTA	GA
	PXX	BRUNSWICK	GA
	HUV	SAURATOWN MT	NC
	GUP	LEXINGTON	SC
	ERU	MEMPHIS	TN
	O	MOUNDSVILLE	WV
9.250/1.250	TPI	PULASKI	TN
9.25 /3.25	UMU	SUMTER	SC
	WIN	NORFOLK	VA
	NOJ	WAYNESBORO	VA
	NOJ	WAYNESBORO	VA
	MM	ALBANY	GA
	NYR	SHELBY	NC
1.25 /9.25	ERU	MEMPHIS	TN
7.00 /2.00	IH	MARION	VA
	CSG	WINCHESTER	VA
7.025/2.025	JA	AUGUSTA	GA
	PML	MORGANTON	NC
7.05 /2.05	DXZ	LANETT(AL)	GA
	XV	JASPER	TN
	BEZ	MEDINA	TN
7.10 /2.10	ACP	MAYODAN	NC
	ABJ	MILAN	TN
7.125/2.125	PLP	ROSSVILLE	GA
7.15 /2.15	BEA	RALEIGH	NC
7.150/2.150	TPI	PULASKI	TN
7.175/2.175	EO	ROCKY FACE	GA
	YUY	ROANOKE	VA
7.20 /2.20	APR	DECATUR	GA
	BJY	OAKFIELD	TN
	LNB	GRAFTON	WV
7.25 /2.25	HTI	COVINGTON	VA
7.275/2.275	VTT	MACON	GA
7.30 /2.30	VFD	CROSS	SC
7.325/2.325	JSR	CHATTANOOGA	TN
7.40 /2.40	ZUS	PICKENS/CSRS HD	SC
7.50 /2.50	NTZ	KNOXVILLE	TN
	CA	ROANOKE/POOR MT	VA
7.500/2.500	YNY	WILMINGTON	NC
7.55 /2.55	JEH	CONYERS	GA
7.625/2.625	EPG	MEMPHIS	TN
7.70 /2.70	AZU	SAVANNAH	GA
	VG	ROANOKE	VA
7.80 /2.80	EPG	JACKSON	TN
7.825/2.825	G	MEMPHIS	TN
7.90 /2.90	AZA	HIGH POINT	NC
7.925/2.925	ASI	COVINGTON	GA
7.95 /2.95	FU	LYNCHBURG	VA
8.00 /3.00	EO	CHATSWORTH	GA
	LUR	LAKE CITY/CRS MT	TN
	ZJM	MEMPHIS	TN
	VL	GALAX/PT LOOKOUT	VA
8.05 /3.05	JVX	GOLDSBORO	NC
	PVB	MT JULIET	TN
8.10 /3.10	IZD	LYNCH/BLACK MT	EKY
	GGC	SAURATOWN MT	NC
	N	GRNVLE/PARIS MT	SC
	G	FAYETTEVILLE	TN
	FHE	BUCKHANNON	WV
8.15 /3.15	S	AUGUSTA	GA
8.20 /3.20	CLA	SWEAT MT	GA
8.30 /3.30	KQI	STATESVILLE	NC
	KJH	GATLBG/COVE MT	TN
8.35 /3.35	FLU	RICHMOND	VA
8.40 /3.40	GMT	CUMBERLAND CITY	TN
	QWW	MEMPHIS	TN
8.425/3.425	SQC	J.CITY/HOLSTN MT	TN
8.45 /3.45	VEK	HIGH PT/LOOKT MT	GA
8.50 /3.50	LVH	ATLANTA	GA
	PQZ	GREENSBORO	NC
	WKS	PARIS/GROVE HL	TN
	GUS	TYSONS CORNER	VA
8.55 /3.55	LVH	ATLANTA/SE	GA
	XE	ROARING GAP	NC
8.60 /3.60	BA	MARIETTA	GA
	DWU	MT MITCHELL	NC
8.625/3.625	PTK	JAMESTOWN	TN
8.65 /3.65	ZV	ATLANTA	GA
	UMI	HAMPTON	VA
8.70 /3.70	LXW	HIGH POINT	NC
	LBT	LOCUST	NC
8.75 /3.75	TF	COVINGTON	GA
	EDS	ALAMO	TN
	WIC	WINDY GAP MT	VA
8.80 /3.80	OKS	JASPER/BIG BUCK	GA
	HNK	SUMMERVILLE	SC
	NDH	CHESAPEAKE	VA
	VA	INDEPENDNCE HILL	VA
	JRL	WYTHEVILLE	VA
8.85 /3.85	PN	WALESKA/PNLOG MT	GA
	IDB	FRANKLIN	TN
8.875/3.875	MZ	HAW RIVER	NC

This Index Concludes at Bottom of Next Page.

SERA REPEATER INDEX LISTINGS BY CITY-BY-STATE

NORTH CAROLINA REPEATERS

2 METERS

AHOSKIE	WB4YNF	144.53	145.13	N	A
AHOSKIE	WA4ZGQ	146.31	146.91	☆	PA
ALBEMARLE	K4OGB	146.385	146.985	☆	A
AQUADALE	WA4CHZ	147.99	147.39	☆	
ASHEBORO	KJ4AV	147.855	147.255	☆	PAL
ASHEVILLE	WA4QCO	146.235	146.835	☆	
ASHVL/MT PISGAH	WA4BVW	146.16	146.76	☆	
ASHVL/SPIVEY MT	W4MOE	146.31	146.91	☆	A
BENSON	AK4H	147.87	147.27	☆	A
BOONE/RICH MTN	WA4KDE	147.96	147.36	☆	
BREVARD/RICH MTN	WB4CJS	147.735	147.135	☆	A
BURGAW	W4DLH	146.34	146.94	☆	
BURLINGTON	WA4YGD	146.07	146.67	☆	A
BURLINGTON	W4VGZ	146.475	147.075	N	EA
BURLINGTON	WA4HBQ	147.675	147.075	N	EA
BURNSVILLE	N4YN	147.975	147.375	N	A
CARTHAGE	W4NIW	147.84	147.24	☆	PA
CHARLOTTE	W4BFB	144.63	145.23	☆	
CHARLOTTE	W4BFB	144.69	145.29	☆	A
CHARLOTTE	WA4AOS	144.75	145.35	N	L
CHARLOTTE	W4BFB	146.34	146.94	☆	A
CHARLOTTE	W4CQ	146.46	147.06	☆	A
CHARLOTTE	WD4PLY	147.99	147.39	N	PA
CHARLOTTE/RTTY	W4BFB	146.175	146.775	☆	RO
CHERRY MT	WA4BKU	146.07	146.67	N	
CLINTON	WA4LZD	146.19	146.79	N	
CONCORD/KANNAP.	K4CEB	146.055	146.655	☆	PA
CROWDERS MT	WD4PLY	144.85	145.45	N	
DUNN	N4CID	146.10	146.70	☆	PA
DURHAM	WA4WTX	144.85	145.45	N	AL
DURHAM	WA4BFT	146.34	146.94	N	A
DURHAM	WD4LDB	147.96	147.36	☆	
EDEN	WA4ACP	147.84	147.24	☆	T
EDEN/STONEVILLE	WA4QBG	147.99	147.39	☆	
ELIZABETH CITY	WA4VTX	146.055	146.655	N	A
FAYETTEVILLE	N4EWG	146.205	146.805	☆	
FAYETTEVILLE	WA4FLR	146.445	147.045	N	R
FAYVLLE/CFARS	WB4YZF	146.31	146.91	N	PA
FAYVLLE/FT BRAGG	W4LPL	147.93	147.33	☆	
FOREST CITY	K4PBG	147.84	147.24	☆	
FRANKLIN	W4ZCZ	144.89	145.49	☆	
FRANKLIN	W4GHZ	147.84	147.24	☆	
GAST/SPCR MT	W4REW	147.72	147.12	N	A
GASTONIA	K4NOQ	146.205	146.805	☆	PA
GIBSONVILLE	WB4IKY	147.72	147.12	☆	ARB
GOLDSBORO	K4CYP	146.25	146.85	☆	A
GREENSBORO	N4GGD	144.65	145.25	N	A
GREENSBORO	K4SNI	146.01	146.61	☆	A
GREENSBORO	WA4MSS	146.16	146.76	☆	
GREENSBORO	W4GG	147.63	147.03	☆	PAL
GREENSBORO	W4BUZ	147.81	147.21	N	
GREENVILLE	N4GVK	144.75	145.35	☆	L
GREENVILLE	K4ROK	147.975	147.375	☆	A
GREENVL/ESTN NC	W4GDF	147.69	147.09	☆	
GRIFTON	W4NBR	146.085	146.685	☆	
HALIFAX	AA4SJ	146.07	146.67	N	A
HENDERSONVILLE	WB4YAO	146.04	146.64	N	L
HENDSVL/BERWLW M	WA4KNI	144.67	145.27	☆	A
HENDSVL/PENIC/MT	WA4KNI	147.855	147.255	☆	A
HICKORY/BRT. MT	WA4MDW	146.25	146.85	N	
HIGH POINT	N4XO	144.81	145.41	N	AO
HIGH POINT	K4AZA	146.40	147.00	☆	LA
HIGH POINT	KB4BPV	147.435	146.835	N	PAL
HIGH POINT	WA4RIS	147.765	147.165	☆	PA
HILLSBOROUGH	WA4WTX	147.825	147.225	N	AL
JACKSONVILLE	WD4FVO	146.40	147.00	☆	A
JEFFERSON	W4YJG	147.90	147.30	☆	A
LAURINBURG	K4QWK	146.025	146.625	☆	A
LENOIR	N4NIN	147.795	147.195	☆	
LENOIR/HIBRITN	KN4K	147.93	147.33	☆	
LEXINGTON	WD4ICX	144.71	145.31	☆	AEA
LEXINGTON	K4IZM	146.31	146.91	☆	AEA
LK NORMN/CLT	WB4KPF	147.615	147.015	N	PA
LONG BEACH	K4JYH	146.175	146.775	☆	
LUMBERTON	WV4Z	147.96	147.36	☆	PA
MACO	WA4LED	147.66	147.06	☆	PA
MADISON	KA4YFF	146.295	146.895	N	
MAGGIE VALLEY	W4HCY	147.405	146.805	☆	
MANTEO/WANCHESE	W4ACY	146.34	146.94	☆	
MARION	WD4PVE	146.385	146.985	☆	A
MAYODAN	WA4ACP	144.69	145.29	☆	
MILLERS CREEK	N4GGN	146.115	146.715	☆	A
MONROE	K4JCK	147.705	147.105	☆	A
MONROE/UCARS	KF4NJ	144.79	145.39	☆	PA
MORENTN/HI PK	WB4UDS	144.55	145.15	N	
MORGANTON	K4VLY	147.75	147.15	☆	
MOUNTAIN HOME	K4GHH	147.705	147.105	☆	
MT AIRY	WA4ZAS	146.37	146.97	N	EA
MT AIRY-RTTY	WA4ZAS	146.34	146.94	N	R
MT MITCHELL	WA4BVW	144.59	145.19	☆	
MT. AIRY	KD4J	144.73	145.33	☆	A
MURPHY	KC4WB	147.795	147.195	N	

This SERA Official
Repeater Index Is Correct
As of July 26, 1989

DISTRIBUTION OF REPEATERS BY FREQUENCY

	LZQ	CAESARS HEAD	SC
8.90 /3.90	GWA	GRIFFIN	GA
	EVG	CHESAPEAKE	VA
8.925/3.925	IU	RINGGOLD	GA
8.95 /3.95	RYF	MEMPHIS	TN
	NTG	WILLIAMSBURG	VA
8.975/3.975	BRN	MEMPHIS	TN
9.00 /4.00	QDX	LAWRENCEVILLE	GA
	JEQ	HICKORY	NC
	ADT	MEMPHIS	TN
	NEI	ROCKWOOD	TN
	SN	PORTSMOUTH	VA
	IT	MULLINS	WV
9.025/4.025	MSE	STONE MT	GA
	RDK	MEMPHIS	TN
9.05 /4.05	PQD	MARIETTA	GA
	OG	NASHVILLE	TN
	OLM	STUARTS DRAFT	VA
9.10 /4.10	WTX	DURHAM	NC
	AM	CHATTANOOGA	TN
	JXT	MEMPHIS	TN
9.15 /4.15	ZTL	ATLANTA/BELL	GA
	NTM	NASHVILLE	TN
	DUM	LEXNGTN/ROCK MT.	VA
	VA	SPRINGFIELD	VA
9.175/4.175	HON	SPRUCE KNOB	WV
9.20 /4.20	LBM	DECATUR	GA
	QHN	PHENIX CITY (AL)	GA
	LB	COLUMBIA	SC
	YTU	BROWNSVILLE	TN
	NEX	MORRISTOWN	TN
	ECM	CHESTER/ENON	VA
	EZA	WAYNESBORO	VA
9.25 /4.25	BOC	ATLANTA/STONE MT	GA
	KNI	HENDSVL/BERWLW M	NC
	PAJ	BARTLETT	TN
	RM	SMYRNA	TN
	TFZ	CHARLOTTESVILLE	VA
9.30 /4.30	MNH	CHARLESTON	SC
	DRL	FISHERVILLE	TN
	GBI	KNOXVILLE	TN
9.325/4.325	BA	MARIETTA	GA
9.35 /4.35	JF	TIFTON	GA
	BKY	GALLATIN	TN
	DBB	BEDFD/APL ORCH	VA
9.375/4.375	BFD	MT OGELTHORPE	GA
9.40 /4.40	ZW	FAYETTEVILLE	NC
	KOG	MEMPHIS	TN
	EAJ	OAK RIDGE	TN
	ARO	PETERSBURG	VA
	BZS	BECKLEY	WV
9.425/4.425	ISI	ALTAVISTA	VA
9.45 /4.45	YTU	BROWNSVILLE	TN
	KWP	GALLATIN	TN
	CRK	FALLS CHURCH	VA
9.50 /4.50	MM	ALBANY	GA
	UWL	ATLANTA	GA
	ICX	LEXINGTON	NC
	LSP	BRISTOL/HLST MT	TN
	KSL	KNOXVILLE	TN
	IZF	MEMPHIS	TN
	HEX	LYNCHBURG	VA
9.55 /4.55	NEF	TYRONE	GA
	JPA	HAMPTON	VA
9.575/4.575	OG	NASHVILLE	TN
9.60 /4.60	BFB	CHARLOTTE	NC
	NK	KNOXVILLE	TN
	JXI	MEMPHIS	TN
	HFH	ALEXANDRIA	VA
	EZR	HUNTINGTON	WV
9.625/4.625	WQ	ATLANTA	GA
	MZ	BLUEFIELD	VA
9.65 /4.65	IBW	SMYRNA	GA
	HF	SALISBURY	NC
	NKM	GREENEVILLE	TN
	ARO	RICHMOND	VA
	QC	PARSONS	WV
9.675/4.675	EBZ	NEWNAN	GA
	AY	NASHVILLE	TN
9.70 /4.70	HHH	ELLIJAY TALONA M	GA
	APS	VALDOSTA	GA
	JEH	ROCKY MOUNT	NC
	DRU	MT PLEASANT	SC
	MMI	MEMPHIS	TN
	LG	MORGANTOWN	WV
9.75 /4.75	EMM	CONYERS	GA
	TC	HENDERSON	TN
	KQI	FOREST	VA
	JYF	TYSONS CORNER	VA
9.775/4.775	NEQ	ATLANTA/MARIETTA	GA
	QES	NASHVILLE	TN
9.80 /4.80	J	GREENVILLE	NC
	UY	MT AIRY/FSH PK	NC
	JXI	MEMPHIS	TN
	LP	MORRISTOWN	TN
	MIC	OILVILLE	VA
	FRV	KINGSTON/BKLY	WV
	CUL	MORGANTOWN	WV
9.825/4.825	ZBP	STAUNTON	VA
4.85 /4.85	BZJ	DALTON	GA
9.85 /4.85	NFP	ATLANTA/MARIETTA	GA
	CQ	CHARLOTTE	NC
	GMP	WILMINGTON	NC
	ARO	RICHMOND	VA
9.875/4.875	LRD	CHATTANOOGA	TN
	BOX	JACKSON	TN
	FMD	JANE LEW	WV
9.90 /4.90	COS	ASHVL/MT PISGAH	NC
	ZW	FAYETTEVILLE	NC
	VBC	NEW BERN	NC
	J	WILSON	NC
	MMI	MEMPHIS	TN
	FQR	WOODBRIDGE	VA
9.925/4.925	NNO	ATLANTA	GA
	BUH	ANDERSON/SAS MT	SC
	ETE	MEMPHIS	TN
9.95 /4.95	I	AUGUSTA	GA
	KIN	PERRY	GA
	WXL	RALEIGH	NC
	SIR	BENTON/BEAN MT	TN
	GP	CLARKSVILLE	TN
	KQQ	MEMPHIS	TN
	WRN	STAUNTON	VA
	KXV	VIRGINIA BEACH	VA
	CQV	S. CHARLESTON	WV
9.975/4.975	TAT	ASHLAND	EKY
	YNZ	ATLANTA	GA
	TVE	BRUNSWICK	GA
	QES	NASHVILLE	TN
6.65 /6.65	DBB	ROANOKE	VA
4.225/9.225	JCE	MANASSAS	VA
4.825/9.825	DOC	ATLANTA	GA
4.925/9.925	TSC	WINCH/BLUEMONT	VA
6.25 /1.25	FHL	ROANOKE	VA
9.25 /3.25	HEX	LYNCHBURG	VA
2.01 /ACON	DRL	FISHERVILLE	TN

The By-City Index Appears
On Following Pages

MORE NORTH CAROLINA REPEATERS

N. WILKESBORO	N4AGN	144.77	145.37	☆	PA
NAGS HEAD/BODIE	N4JXG	146.235	146.835	☆	PA
NEW BERN	WD4JMS	146.01	146.61	☆	AL
NEWPORT	K4GRW	144.85	145.45	N	AL
NEWTON	AG4L	147.675	147.075	☆	A
NEWTON/ANDSN MT	W4ZQB	144.57	145.17	N	
OXFORD	N4EKK	144.57	145.17	N	PA
RALEIGH	N4BEA	144.67	145.27	☆	PAL
RALEIGH	K4BWC	144.89	145.49	☆	R
RALEIGH	W4DW	146.04	146.64	N	PA
RALEIGH	K4BWC	146.13	146.73	☆	PA
RALEIGH	WB4TQD	146.28	146.88	D	L
RALEIGH	WB4TQD	147.75	147.15	D	PA
RANDLEMAN/GBO	WD4CVM	144.55	145.15	☆	CL
RED SPRINGS	W4MZP	147.90	147.30	☆	PA
REIDSVILLE	K4YFT	146.25	146.85	N	
ROANOKE RAPIDS	WA4DTS	147.63	147.03	☆	
ROARING GAP	WB4PZA	146.22	146.82	☆	
ROB/JOANNA BLD	WD4CNS	146.445	147.045	N	
ROCKINGHAM	WA4ULA	146.355	146.955	N	
ROCKY MOUNT	K4EWL	147.72	147.12	☆	TEA
SALISBURY	W4EXU	146.13	146.73	☆	EAL
SANFORD	WB4EJJ	147.78	147.18	N	A
SAURATOWN MT	W4RXG	144.51	145.11	☆	R
SAURATOWN MT	WA4GIC	144.87	145.47	☆	
SAURATOWN MT	N4QDK	146.19	146.79	☆	PA
SHALLOTTE	K4PPD	144.77	145.37	☆	PA E
SHALLOTTE	N4FAU	147.99	147.39	☆	PA
SHELBY	W4NYR	146.28	146.88	☆	
SHELBY	W4NYR	147.945	147.345	☆	PA
SMITHFIELD	KD4JQ	146.37	146.97	☆	A
SPARTA/GREEN MT	K4ITL	144.83	145.43	D	L
SPRING LAKE	WB4KDC	146.115	146.715	N	
STATESVILLE	AI4O	146.085	146.685	☆	PA
STATSVL/ASBRY MT	WA4JRL	147.645	147.045	N	
SWANSBORO	KO4S	146.16	146.76	☆	
TABOR CITY	W4DCD	146.175	146.775	☆	ALRB
TRENTON	K4ITL	144.61	145.21	D	L
TUCKASEGEE	W8OMV	147.90	147.30	N	
WADESBORO	WA4IAT	146.235	146.835	N	
WALKERTOWN	WA4RBW	147.915	147.315	☆	
WASHINGTON	WA4TEP	147.945	147.345	☆	
WAXHAW	WA4ZRS	147.465	146.865	☆	PA
WAYNESVILLE	N4SM	147.87	147.27	☆	A
WHITEVILLE	K4MSD	147.81	147.21	☆	AL
WILLIAMSTON	KA4KNU	144.81	145.41	☆	A
WILMINGTON	W4VNK	146.13	146.73	☆	PA
WILMINGTON	K4GMP	146.22	146.82	☆	L
WILMINGTON	N4CTJ	147.78	147.18	N	AL
WILSON	WB4THL	146.16	146.76	☆	A
WINSTON-SALEM	WA4GIC	146.04	146.64	☆	AL

220 MHZ

ASHEVILLE	NC4N	223.00	224.60	☆	L
ASHVL/MT PISGAH	WA4BVW	222.34	223.94	☆	
CHARLT/MINT HL	KE4ZC	222.80	224.40	☆	
CHERRYVILLE	WB4UDS	223.36	224.96	N	
FAYETTEVILLE	W4EHF	222.42	224.02	☆	L
GOLDSBORO	WB3JVX	223.36	224.96	N	EAC
GREENSBORO	WB4WOR	222.54	224.14	☆	CK
GREENSBORO	KB4KQI	223.22	224.82	N	PAL
GRIFTON	WA4DAN	223.24	224.84	☆	L
HENDSVL/BERWLW M	WA4KNI	222.64	224.24	☆	
HICKORY	WA4MDW	222.42	224.02	N	
HIGH POINT	K4AZA	222.32	223.92	☆	LA
HIGH POINT	N4NNR	223.00	224.60	N	PA
HILLSBOROUGH	WA4WTX	222.34	223.94	N	L
LENOIR/HIBRITN	KN4K	222.56	224.16	☆	
LINWOOD	KA4HUV	222.38	223.98	N	
LK NORMN/CLT	WB4KPF	223.08	224.68	N	
LOCUST	WA4ZIA	222.40	224.00	☆	PAL
MARS HILL	KA4TYO	223.06	224.66	N	L
MARSHALL	KA4TYO	222.76	224.36	N	L
MAYODAN MT	WA4ACP	222.62	224.22	☆	T
MORGANTON	WB4PML	223.20	224.80	☆	T
MT MITCHELL	WA4BVW	222.94	224.54	☆	
MT. TOXAWAY	K4MSK	223.12	224.72	N	
RALEIGH	WA4PEN	223.04	224.64	N	
RIEGELWOOD	K4YNY	222.58	224.18	N	L
ROCKY MOUNT	NF4C	222.36	223.96	☆	PA
SALISBURY	W4EXU	223.16	224.76	☆	L
SAURATOWN MT	WA4YHH	222.98	224.58	☆	
SAURATOWN MT	W4RXG	223.10	224.70	☆	R
SAURATOWN MT	W4RXG	223.28	224.88	☆	
SAURATOWN MT	WA4WTB	223.36	224.96	N	C
STATESVILLE	WA4PVI	222.70	224.30	☆	
WILMINGTON	K4YNY	222.90	224.50	N	CL
WINSTON-SALEM	WA4YHH	223.04	224.64	☆	PA

440 MHZ

ASHVL/MT PISGAH	WA4COS	449.90	444.90	N	
CHARLOTTE	W4BFB	449.60	444.60	☆	
CHARLOTTE	W4CQ	449.85	444.85	☆	
DURHAM	WA4WTX	449.10	444.10	N	AL
FAYETTEVILLE	KB4ZW	449.40	444.40	N	
FAYETTEVILLE	KB4ZW	449.90	444.90	N	P
GOLDSBORO	WB3JVX	448.05	443.05	N	EA
GREENSBORO	WD4PQZ	448.50	443.50	☆	RB
GREENVILLE	AI4J	449.80	444.80	N	
HAW RIVER	K2MZ	448.875	443.875	☆	T
HENDSVL/BERWLW M	WA4KNI	449.25	444.25	☆	
HICKORY	K4JEQ	449.00	444.00	D	
HIGH POINT	K4AZA	447.90	442.90	☆	L
HIGH POINT	N4LXW	448.70	443.70	N	
LEXINGTON	WD4ICX	449.50	444.50	☆	
LOCUST	WA4LBT	448.70	443.70	☆	PAL
MAYODAN	WA4ACP	447.10	442.10	☆	
MORGANTON	WB4PML	447.025	442.025	☆	P
MT AIRY/FSH PK	KF4UY	449.80	444.80	☆	LRB
MT MITCHELL	N4DWU	448.60	443.60	☆	
NEW BERN	WA4VBC	449.90	444.90	☆	O
RALEIGH	N4BEA	447.15	442.15	☆	L
RALEIGH	WA1WXL	449.95	444.95	☆	
ROARING GAP	KC4XE	448.55	443.55	☆	L
ROCKY MOUNT	N4JEH	449.70	444.70	☆	PA
SALISBURY	KJ4HF	449.65	444.65	☆	ARB
SAURATOWN MT	WA4HUV	439.25	421.25	☆	V
SAURATOWN MT	N4GGC	448.10	443.10	☆	L
SHELBY	W4NYR	439.25	427.25	☆	V
STATESVILLE	KB4KQI	448.30	443.30	N	RB
WILMINGTON	K4YNY	447.500	442.500	N	ALRB
WILMINGTON	K4GMP	449.85	444.85	☆	
WILSON	NE4J	449.90	444.90	☆	

6 METERS

HENDERSONVILLE	WB4YAO	52.01	53.01	N	
HENDERSONVILLE	WB4YAO	52.525	52.525	N	RB
HICKORY	WA4MDW	52.47	53.47	N	
HIGH POINT	K4AZA	52.525	52.525	☆	RB
RALEIGH/BUTNER	WB4RZF	52.25	53.25	N	C
STATESVILLE	WA4WRS	52.67	53.67	N	C

10 METERS

MAYODAN	WA4ACP	29.56	29.66	☆	T
WILKESBORO	KC4XE	29.52	29.62	☆	L

PACKET

BEARWALLOW MT.	WA4KNI-1	145.01	BRA	☆	K
CHARLOTTE	W4BFB-1	145.01	PKET	☆	K
CHARLOTTE	W4CQ-1	145.01	PKET	☆	K
CHARLOTTE	W4BFB	145.05	PKET	☆	K
CHERRY MTN	WB4RDL-1	145.01	PKET	N	K
COLFAX	KE4TH-1	145.07	PKET	N	K
CONCORD	K4CEB-1	145.05	PKET	☆	K
ELIZABETH CITY	WA4KXV-2	145.01	PKET	☆	K
GOLDSBORO	K4CYP-1	145.01	PKET	☆	K
GREENSBORO	WB4WOR-5	145.01	NCTRD	☆	K
GREENSBORO	WB4WOR-6	145.65	GSO	☆	K
GREENVILLE	WD4JPQ-1	145.01	PKET	N	K
LINVILLE	KB4NHB-2	145.05	LNVL	N	K
LUMBERTON	W4NHV	145.01	PKET	☆	K
MARS HILL	K4ZMC-1	145.01	MARS	N	K
RALEIGH	K4ITL-1	145.01	PKET	D	K
SAURATOWN MT	W4RXG-1	145.01	PKET	☆	K
WILMINGTON	KB4NOZ-1	145.01	PKET	☆	K
WILMINGTON	KB4NOZ-3	145.63	PKET	☆	K

VIRGINIA REPEATERS

2 METERS

ABINGDN/BRMLY MT	K4LSP	146.01	146.61	D	
ACCOMAC	WA4TVS	147.855	147.255	☆	EA
ALEXANDRIA	N4FSC	144.71	145.31		MPA
ALEXANDRIA	WD4PDP	146.055	146.655		MPA
ALEXANDRIA	W4HFH	147.915	147.315		ML
ALTAVISTA	WA4ISI	146.055	146.655	☆	A
ARLINGTON	N4EFJ	144.87	145.47		M
ARLINGTON	WA4YVM	146.445	147.045		MT
BARREN SPRINGS	K4HZS	146.07	146.67	☆	
BEDFD/APL ORCH	WB4DBB	144.63	145.23	☆	
BEDFORD	WB4JBJ	147.705	147.105	N	PAL
BLACKSBURG	AB9I	146.115	146.715	☆	
BLAND	N4AZJ	144.75	145.35	☆	PARB
BLUEFIELD	W8MOP	144.89	145.49	☆	PA
BRISTOL	WD4CYZ	146.28	146.88	N	
CHARLOTTESVILLE	WA4TFZ	146.16	146.76	☆	
CHARLOTTESVILLE	WA4TFZ	146.325	146.925	☆	
CHASE CITY	W4AXH	146.31	146.91	☆	
CHESAPEAKE	K4NDH	144.69	145.29	☆	EA
CHESAPEAKE	N4GSP	146.01	146.61	☆	AEA
CHESAPEAKE	N4SD	146.19	146.79	☆	A
CHESTERFIELD	KA4CBB	147.96	147.36	☆	
CHESTERFLD CO	WA4ECM	147.66	147.06	☆	A
COVINGTON	WA4HTI	146.205	146.805	N	
CULPEPER	N4FAF	147.72	147.12		M

MORE VIRGINIA REPEATERS

DANTE	WD4CYZ	147.855	147.255	N	
DANVILLE(DCC)	WB4GJG	146.325	146.925	☆	EA
DANVILLE/WHT OAK	K4WQS	146.10	146.70	☆	PA
FAIRFAX	W4LBL	146.19	146.79		MPA
FALLS CHURCH	W4AQD	144.75	145.35		MT
FARMVILLE	WA4QQI	144.73	145.33	☆	
FINCASTLE	W4WIC	146.04	146.64	☆	L
FRANKLIN	K4SPS	147.90	147.30	☆	PA
FREDRICKSBURG	WB4LNT	147.615	147.015		M
GALAX	WA4ZIV	144.79	145.39	N	PATO
GALAX/BRIRP MT	N4VL	147.69	147.09	☆	A
GALAX/LKOUT MT	N4VL	144.53	145.13	☆	RB
GLADYS	N4SJM	147.945	147.345		
GLOUCESTER	NB4P	144.77	145.37	☆	
GRUNDY	K4HWQ	147.92	147.32	N	ANB
GRUNDY/BIG A MT	WD4DCX	146.235	146.835	N	
GUM SPRING	KB4GX	147.87	147.27	☆	
HAMPTON	K4DHO	146.13	146.73	☆	PA
HAMPTON	K4UMI	146.34	146.94	N	T
HARRISONBURG	WX4C	147.825	147.225	☆	A M
KILMARNOCK	W2MS	144.61	145.21	☆	A
LEXINGTON	KI4ZR	146.07	146.67	☆	RB
LEXINGTON	KI4ZR	147.90	147.30	☆	A
LEXNGTN/ROCK MT.	K4PQD	147.93	147.33	N	O
LUNENBURG CT.HSE	AA4OG	147.84	147.24	☆	
LYNCHBURG	W4WWQ	146.01	146.61	N	
LYNCHBURG	AB4M	146.415	147.015	☆	PA
LYNCHBURG	WA4RTS	147.795	147.195	☆	
LYNCHBURG	KB4ILD	147.975	147.375	N	PA
MADISON	N4AJO	147.99	147.39		M
MANASSAS	WD4JCE	144.67	145.27		MR
MANASSAS	WA4FPM	146.37	146.97		MPA
MARION	KC4IH	146.04	146.64	☆	PA
MARTINSVILLE	AB4L	147.885	147.285	☆	
MCLEAN	WD4IWG	147.81	147.21		MR
MIDDLEBROOK	W4WRN	146.37	146.97	N	EA
MOUNTAIN LAKE	KD8MZ	147.465	146.865	☆	PAL
MT.LAKE/BALD KNB	K4TUE	146.31	146.91	☆	
NEW MARKET	K4AVW	146.025	146.625	M	M
NEWPORT NEWS	WA4OHX	144.89	145.49	N	PA
NEWPORT NEWS	WB4CTF	147.765	147.165	☆	PALR
NORFOLK	WA4ZUA	144.57	145.17	☆	
NORFOLK	NE4D	146.10	146.70	☆	EA
NORTON/HIGH KNOB	K4AXO	146.415	147.015	N	
ONEIDA PEAK/BLF	KD8MZ	146.355	146.955	☆	PAL
PEARISBURG	N4AZJ	147.735	147.135	☆	
PENNINGTON GAP	N4LQC	146.10	146.70	☆	
PETERSBURG	K4ARO	144.55	145.15	☆	
PETERSBURG	K4ARO	147.99	147.39	☆	
PKS KB/PULASKI	KT4Z	147.78	147.18	☆	PA
PORTSMOUTH	W4POX	146.25	146.85	☆	A
RICHMOND	K4YPE	144.51	145.11	☆	A
RICHMOND	WB4FAX	144.59	145.19	☆	
RICHMOND	W4SQT	144.83	145.43	☆	PA
RICHMOND	WB4QEY	146.04	146.64	☆	PA
RICHMOND	WA4ZBE	146.28	146.88	☆	PA
RICHMOND	W4ZA	146.34	146.94	☆	
RICHMOND	WA4JST	146.43	147.03	N	
RICHMOND	N4HB	147.735	147.135	☆	
ROANOKE	N4AP	146.34	146.94	N	A
ROANOKE/POOR MT	KC4DY	146.145	146.745	☆	PAL
ROANOKE/POOR MT	W4CA	146.385	146.985	☆	PAL
ROANOKE/POOR MT.	WB4QOJ	144.61	145.21	☆	RVK
SALEM	W4PDL	146.28	146.88	N	
STAUNTON	W4XD	146.10	146.70	☆	
STAUNTON	WA4ZBP	146.25	146.85	☆	RBR
STAUNTON/EL. KB	N4RAG	147.645	147.045	☆	
STERLING	WA4TXE	146.115	146.715		M
STUARTS DRAFT	KB4OLM	147.96	147.36	N	
SUFFOLK/GASBURG	WA4HMT	146.40	147.00	N	PAEA
TAZEWELL	WA4QKH	147.75	147.15	N	
TYSONS CORNER	WB4FMD	146.31	146.91		MPA
VIENNA	K4HTA	146.085	146.685		M
VIRGINIA BEACH	WA4KXV	146.295	146.895	☆	
VIRGINIA BEACH	WA4KXV	146.37	146.97	☆	EA
VIRGINIA BEACH	WA4SBC	147.645	147.045	N	
VIRGINIA BEACH	W4NV	147.975	147.375	☆	
VOLENS	WD4LBM	146.46	147.06	☆	PA
WARRENTON	WB4FJT	147.765	147.165		M
WARSAW	KA4ZIP	147.93	147.33	☆	EA
WAYNESBORO	W4BLD	147.63	147.03	☆	O
WAYNSBR/BEAR DEN	W4PNT	147.675	147.075	☆	PAEA
WILLIAMSBURG	W4NTG	146.07	146.67	☆	
WILLIAMSBURG	KB4ZIN	146.16	146.76	☆	A
WINCH/BLUEMONT	WA4TSC	147.90	147.30		M
WINCHESTER	W4RKC	146.22	146.82	☆	M
WOODBRIDGE	WB4FQR	147.84	147.24		MA
WYTHEVILLE	WD4MUQ	146.175	146.775	☆	A
WYTHEVL/SAND MT.	KC4VR	144.67	145.27	N	AL
YORKTOWN	WD4SDC	147.825	147.225	N	PAT

220 MHZ

ALEXANDRIA	WA4CCF	223.22	224.82		ML
BEDFD/APL ORCH	WB4DBB	223.94	222.34	☆	RBL
BEDFORD	N4PLV	223.24	224.84	☆	C
CHARLOTTESVILLE	WA4TFZ	223.50	223.50	☆	RB
CHESAPEAKE	WA6GVC	223.34	224.94	N	
DAN/WHT OAK	K4OAK	223.16	224.76	N	
DANVILLE	WB4GJG	222.78	224.38	D	
DELTAVILLE	AA4HQ	222.40	224.00	☆	
FAIRFAX	WB4YHD	222.50	224.10		ML
FAIRFAX	WD4KHP	222.82	224.42	☆	PALT
FALLS CHURCH	N4CHP	223.38	224.98		MPA
HAMPDEN-SYDNEY	WB4PEA	222.60	224.20	☆	
LYNCHBURG	AB4M	222.68	224.28	☆	PA
MARTINSVILLE	WB4BVI	222.90	224.50	☆	PAT
NEWPORT NEWS	KB4UHA	223.26	224.86	N	
NORTON/HIGH KB	WA4NDQ	222.82	224.42	☆	
ROANOKE	WB4DBB	222.50	224.10	☆	L
ROANOKE/POOR MTN	WB4DBB	223.34	224.94	☆	
STERLING PARK	WD4KHP	222.12	223.72	☆	M
STUARTS DRAFT	KB4OLM	223.36	224.96	N	AL
TYSONS CORNER	WD4KHP	223.12	224.72	☆	PARB
VIRGINIA BEACH	WD8DAS	222.58	224.18	N	

440 MHZ

ALEXANDRIA	W4HFH	449.60	444.60		M
ALTAVISTA	WA4ISI	449.425	444.425	☆	L
BEDFD/APL ORCH	WB4DBB	449.35	444.35	☆	L
BLUEFIELD	KD8MZ	449.625	444.625	☆	PAL
CHARLOTTESVILLE	WA4TFZ	449.25	444.25	☆	
CHESAPEAKE	K4NDH	448.80	443.80	☆	PA
CHESAPEAKE	N4EVG	448.90	443.90	☆	PAEA
CHESTER/ENON	WA4ECM	449.20	444.20	☆	RB
COVINGTON	WA4HTI	447.25	442.25	N	
FALLS CHURCH	WB8CRK	449.45	444.45		ML
FOREST	WD4KQI	449.75	444.75	N	A
GALAX/PT LOOKOUT	N4VL	448.00	443.00	☆	L
HAMPTON	K4UMI	448.65	443.65	N	
HAMPTON	WB4JPA	449.55	444.55	☆	PAT
INDEPENDNCE HILL	AA4VA	448.80	443.80		M
LEXNGTN/ROCK MT.	WA4DUM	449.15	444.15	N	O
LYNCHBURG	K4HEX	439.25	923.25	N	CV
LYNCHBURG	AB4FU	447.95	442.95	☆	PA
LYNCHBURG	K4HEX	449.50	444.50	N	
MANASSAS	WD4JCE	444.225	449.225		ML
MARION	KC4IH	447.00	442.00	☆	
NORFOLK	W4WIN	439.25	426.25	N	V
OILVILLE	KB4MIC	449.80	444.80	☆	PA
PETERSBURG	K4ARO	449.40	444.40	☆	T
PORTSMOUTH	KK4SN	449.00	444.00	N	
RICHMOND	N4FLU	448.35	443.35	N	
RICHMOND	K4ARO	449.65	444.65	☆	
RICHMOND	K4ARO	449.85	444.85	☆	
ROANOKE	N4FHL	426.25	911.25	☆	V
ROANOKE	WB4DBB	446.65	446.65	☆	L
ROANOKE	KA4YUY	447.175	442.175	☆	
ROANOKE	N4VG	447.70	442.70	☆	
ROANOKE/POOR MT	W4CA	447.50	442.50	☆	L
SPRINGFIELD	AA4VA	449.15	444.15		M
STAUNTON	WA4ZBP	449.825	444.825	☆	
STAUNTON	W4WRN	449.95	444.95	N	
STUARTS DRAFT	KB4OLM	449.05	444.05	N	
TYSONS CORNER	WB6GUS	448.50	443.50		M
TYSONS CORNER	K4JYF	449.75	444.75		M
VIRGINIA BEACH	WA4KXV	449.95	444.95	☆	
WAYNESBORO	KA5NOJ	439.25	426.25	☆	VC
WAYNESBORO	KA5NOJ	439.25	426.25	N	V
WAYNESBORO	WA4EZA	449.20	444.20	N	
WILLIAMSBURG	W4NTG	448.95	443.95	☆	
WINCH/BLUEMONT	WA4TSC	444.925	449.925		M
WINCHESTER	W3CSG	447.00	442.00		M
WINDY GAP MT	W4WIC	448.75	443.75	☆	AL
WOODBRIDGE	WB4FQR	449.90	444.90		M
WYTHEVILLE	KA4JRL	448.80	443.80	N	C

SERA REPEATER SYMBOLS

★	Full Member Supporter
D	Delinquent Membership
N	Non-Member SERA
NB	Not On SERA Freq. Plan
M	T-MARC Terr. Repeater
A	Autopatch (Open)
PA	Private Autopatch
EA	Emergency Autopatch
T	Tone Access Repeater
L	Linked Repeater
K	Packet Operation
R	Radioteletype Operation
V	Television (SSTV or ATV)
P	Proposed Repeater Coord.
C	Under Construction
O	Off the Air Temporarily
RB	Remote Base System

NOTE: Some repeaters allow voice, as well as other functions on their machine. Generally the second function is indicated, but does not necessarily mean the machine is solely operated in that mode. Operators may check with owners for information. Digipeters within the Packet frequency spectrum are listed under PACKET. Repeaters with normal input/output (pairs) are listed in the regular FM repeater index and their operation of Packet is indicated with "K".

MORE VIRGINIA REPEATERS

6 METERS

ALEXANDRIA	WA4CCF	52.13	53.13		ML
BEDFORD/THAX MT	WB4DBB	52.15	53.15	☆	
CENTERVILLE	KA4DCS	52.58	52.48		M
CHARLOTTESVILLE	WA4TFZ	52.525	52.525	☆	RBO
DANVILLE(DCC)	WB4GJG	52.13	53.13	☆	
FAIRFAX	WD4KHP	52.62	52.82	☆	PALT
LEXNGTN/ROCK MT.	WA4DUM	52.01	53.01	N	L O
LOUISA	KA4NNN	52.07	53.07	N	
RICHMOND	WB4FAX	52.43	53.43	☆	
RIDGEWAY	KE4FJ	52.25	53.25	N	
ROANOKE	WB4DBB	52.25	53.25	☆	L
ROANOKE/POOR MT	WB8BON	52.09	53.09	☆	CL
VIRGINIA BEACH	WD8DAS	52.21	53.21	N	

10 METERS

CHARLOTTESVILLE	WA4TFZ	29.60	29.60	☆	RBO
NEWPORT NEWS	WB4CTF	29.60	29.60	☆	RB
ONEIDA PK/BLFLD	KD8MZ	29.58	29.68	☆	RBL
ROANOKE/POOR MT	WB8BON	29.54	29.64	☆	CL
STERLING	KD4DN	29.58	29.68		M

PACKET

ACCOMAC	KJ4AG-1	145.01	PKET	☆	K
AFTON MT.	W4BLD-2	145.03	LAN	☆	K
BEAR DEN MT	W4BLD-1	145.01	BRDN	☆	K
BLAND	N4AZJ-1	145.01	BLD	☆	K
BLUEFIELD	WB4BBF-1	145.01	BLF	☆	K
CAPE CHARLES	KJ4AG-3	145.05	PKET	☆	K
CHARLOTTESVILLE	WA4TFZ-2	145.03	PKET	☆	K
CHESAPEAKE	N4SD-1	145.01	PKET	☆	K
COVINGTON	WA4PGI-1	145.01	COVA	N	K
DANVILLE/WHT/OAK	WB4QOJ-3	145.07	PKET	☆	K
FANCY GAP	WA4LWE-1	145.01	FGAP	N	K
FREDERICKSBURG	KB4OB-1	145.01	PKET		KM
GARRISONVILLE	AA4PB-1	145.07	PKET	N	K
GRUNDY	KK4EH-1	145.01	GDY	N	K
HAMPTON	K4UMI-5	145.01	PKET	N	K
LYNCHBURG	K4LKQ-1	145.01	PKET	N	K
MARION	N4IQW-1	145.01	MRN	N	K
MARION	N4IQV-9	145.09	PKET	N	K
MIDDLEBURG	WA4TSC-1	145.01	PKET		KM
NASSAWADOX	KJ4AG-2	145.01	PKET	☆	K
NORTON/HI KNOB	KC4IH-1	145.01	HINOB	☆	K
PEARISBURG	KC4VR-1	145.01	DPK	☆	K
PETERSBURG	K4ARO-1	145.01	PKET	☆	K
RICHMOND	WA4ONG-1	145.65	PKET	N	K
ROANOKE	N4FHL-1	145.01	ROA	☆	K
ROANOKE	N4MGQ-9	145.09	PKET	☆	K
ROANOKE/POOR MT	KM4IG-5	145.05	RKE5	N	K
ROANOKE/POOR MT.	KB4PW-1	145.01	ROAVA	N	K
ROANOKE/POOR MT.	WB4QOJ-2	221.01	ROA22	☆	K
ROANOKE/TINKER	WB4QOJ-1	145.07	PKET	☆	K
STEPHENS CITY	W3CSG	145.01	PKET		KM
VIRGINIA BEACH	WA4KXV-1	145.01	PKET	☆	K
VIRGINIA BEACH	WA4KXV-3	221.01	PKET	☆	K
WASHINGTON, D.C.	WB4JFI-5	145.01	PKET		KM
WAYNESBORO	W4BLD-3	446.05	PKET	☆	K
WOODBRIDGE	N4IYV-1	145.01	PKET	M	K
WOODBRIDGE	N4IYV-7	145.07	PKET	M	K
WOODBRIDGE	N4IYV-4	446.075	PKET	M	K
WYTHEVILLE	N4KZL-1	145.01	WYTHE	☆	K
WYTHEVILLE	N4KZL-9	145.09	PKET	☆	K

SOUTH CAROLINA REPEATERS

2 METERS

AIKEN	N4ADM	147.885	147.285	☆	PA
ANDERSON	N4SZ	146.37	146.97	☆	PA
ANDERSON/SAS MT	W4FVV	146.19	146.79	☆	
BAMBERG	WA4DFP	144.73	145.33	☆	
BARNWELL	WA4FOF	147.63	147.03	☆	
BIG KNOB/GREY CT	KB4YF	146.265	146.865	☆	
CHARLESTON	WB4URP	144.65	145.25	N	
CHARLESTON	K4ILT	146.16	146.76	N	PA
CHARLESTON	K4ILT	146.19	146.79	N	
CHARLESTON	WB4LET	147.87	147.27	☆	PAL
CHELSEA	KB4GY	146.34	146.94	☆	
CHERAW	KA4ABW	147.735	147.135	N	PA
COLUMBIA	KC4LB	144.83	145.43	☆	PA
COLUMBIA	WB4NEP	146.115	146.715	N	PA
COLUMBIA	K4AVU	146.28	146.88	N	
COLUMBIA	N4NUY	147.93	147.33	N	
CONWAY	WD4JMT	144.51	145.11	☆	
DILLON/PEE DEE	NN4N	146.145	146.745	☆	
DORCHESTER	W4NAT	147.78	147.18	☆	
FLORENCE	W4ULH	146.25	146.85	N	A
FLORENCE	WA4ISM	146.37	146.97	☆	PA
FT MILL/CAROWND	AA4SC	147.78	147.18	☆	
GASTON	WB4NEP	144.61	145.21	N	PA
GEORGETOWN	WD4DMI	147.975	147.375	N	
GREENVILLE	W4IQQ	146.34	146.94	N	
GREENVILLE	K4LEO	147.975	147.375	☆	T
GREENWOOD	K4VIA	147.765	147.165	☆	PA
GREENWOOD/HODGES	KB4CS	144.53	145.13	N	
GRNVLE/CSRS HD	W4NYK	146.01	146.61	☆	
GRNVLE/PARIS MT	W4NYK	146.22	146.82	☆	PA
HILTON HEAD	N1BAL	147.84	147.24	☆	
INMAN	WD8OXE	144.87	145.47	☆	PA
LANCASTER	W4PAX	146.10	146.70	☆	
LANCASTER	KC4AC	147.84	147.24	☆	
LEXINGTON	KA4FEC	147.99	147.39	☆	
LITTLE MT.	K4AVU	147.81	147.21	N	
MARION	W4YLT	146.40	147.00	N	EA
MONCKS CORNER	KA4BJM	147.75	147.15	N	
MT PLEASANT	K4ESG	146.385	146.985	N	PA
MT. PLEASANT	K4LWS	147.90	147.30	N	PAT
MYRTLE BEACH	WD4JMT	147.72	147.12	☆	EA
MYT BEA/BRKSVLLE	W4DCD	147.885	147.285	☆	AL
N. AUGUSTA	K4FKJ	146.13	146.73	☆	
N. MYRTLE BEACH	K4HOG	147.63	147.03	☆	PA
NEWBERRY	KB4CO	146.085	146.685	☆	
ORANGEBURG	K4RDN	147.69	147.09	N	C
PICKENS	WB4YXZ	146.40	147.00	N	
RKY RDG/WALLACE	KA4ABW	144.89	145.49	☆	A
ROCK HILL	AA4PF	144.71	145.31	☆	PAL
ROCK HILL	K4YTZ	146.43	147.03	☆	PA
ROCKY SPUR	WD4MGM	147.885	147.285	☆	
SANTEE	W4DTW	147.825	147.225	N	A
SENECA/LONG MT	WA4JRJ	147.87	147.27	N	PA
SIMPSONVILLE	WD4BJY	146.13	146.73	☆	
SIMPSONVILLE	WA4SDT	147.75	147.15	N	R
SPARTANBURG	K4JLA	147.69	147.09	N	
ST. MATTHEWS	AD4U	146.07	146.67	☆	PA
SUMMERTON	N4LWY	144.55	145.15	☆	PA
SUMTER	KB4FIQ	146.04	146.64	N	
SUMTER	WA4UMU	147.615	147.015	N	EA
SUMTER/SHAW	W4VFR	147.66	147.06	☆	A
WHITE HALL	W4BWZ	146.31	146.91	N	

220 MHZ

COLUMBIA	N4EOY	223.30	224.90	☆	RB
CROSS	KB4VFD	222.98	224.58	N	C
GREER	W4ILY	222.38	223.98	N	PA
LITTLE MT	KA4FEC	222.52	224.12	☆	
PICKENS/CSRS HD	WB4QHF	222.54	224.14	☆	PA
PICKENS/SASFR MT	AJ4N	222.46	224.06	☆	
RIDGEVILLE	N4CII	222.48	224.08	☆	

440 MHZ

ANDERSON/SAS MT	WD4BUH	449.925	444.925	N	
CAESARS HEAD	WB4LZQ	448.875	443.875	N	
CHARLESTON	N4MNH	449.30	444.30	☆	A
COLUMBIA	KC4LB	449.20	444.20	☆	RB
CROSS	KB4VFD	447.30	442.30	N	C
GRNVLE/PARIS MT	ND4N	448.10	443.10	☆	
LEXINGTON	N4GUP	439.25	421.25	☆	V
MT PLEASANT	N4DRU	449.70	444.70	N	
PICKENS/CSRS HD	KA4ZUS	447.40	442.40	☆	
SUMMERVILLE	WA4HNK	448.80	443.80	☆	PA
SUMTER	WA4UMU	439.25	423.25	N	V

10 METERS

RKY RDG/WALLACE	KA4ABW	29.60	RMT.BS	☆	RB

6 METERS

PICKENS	WB4YXY	52.41	53.41	N	

PACKET

ANDERSON	KA4YEA-1	145.07	PKET	☆	K
ANDERSON/SAS MT	W4FX-1	145.01	PKET	☆	K
CHARLESTON	N4LYF-1	145.01	PKET	N	K
CHARLESTON	WD4NUN-9	145.01	CHS	☆	K
CHARLESTON	WN4Y-5	145.05	PKET	N	K
COLUMBIA	N4EOY-1	145.01	CAE1	☆	K
COLUMBIA	N4EOY-5	145.05	CAE	☆	KL
COLUMBIA	N4EOY-6	223.40	CAE22	☆	KL
CONWAY	WA4TKM-1	145.01	PKET	N	K
CROSS	KB4VFD-4	145.05	PKET	N	K
FLORENCE	W4ULH-1	145.01	PKET	N	K
GREY COURT/GRNVL	WV4B-7	145.07	GRD7	☆	K
GREY COURT/GRNVL	WV4B-5	223.40	GRD5	☆	K
LANCASTER	K4WJR-1	145.01	LKR	N	K
LANCASTER	K4WJR-3	145.65	T73	N	K
LANCASTER	K4WJR-2	223.40	LKR22	N	K
SUMTER	KK4QZ-1	145.01	PKET	N	K

TENNESSEE REPEATERS

2 METERS

ALAMO	WB4EDS	147.735	147.135	N	
ATHENS	WB4GRC	144.71	145.31	N	
BENTON	K4SIR	144.85	145.45	N	T
BLOUNTVILLE	WA4KMG	147.60	147.00	N	
BRISTOL	K4ILW	146.07	146.67	☆	A
BRISTOL	WD4CYZ	146.28	146.88	N	
BRISTOL/HLSTN MT	K4LSP	146.16	146.76	N	A
BROWNSVILLE	KB4YTU	144.83	145.43		
BROWNSVILLE	WA4ABU	146.055	146.655	N	
CARTHAGE	N4OTT	144.59	145.19	☆	PA
CHATT/SIGNAL MT	AD4F	146.055	146.655	☆	
CHATT/SIGNAL MT	WA4ZOK	147.60	147.00	N	PA
CHATTANOOGA	K4VCM	144.69	145.29	D	
CHATTANOOGA	W4AM	144.79	145.39	N	A
CHATTANOOGA	K4CMY	146.01	146.61	D	
CHATTANOOGA	W4AM	146.19	146.79	N	A
CHATTANOOGA-RTTY	K4CMY	144.53	145.13	N	
CLARKSVILLE	WD4SGA	147.60	147.00	N	
CLARKSVILLE	AA4TA	147.99	147.39	☆	
CLEVELAND	W4GZX	146.31	146.91	N	C
COLLIERVILLE	KB4YGI	144.53	145.13	N	
COLUMBIA	KE4KO	144.85	145.45	☆	
COOKEVILLE	WA4UCE	144.83	145.43	N	A
COOKEVILLE	K4HKZ	147.645	147.045	N	C
COOKEVILLE	N4WS	147.81	147.21	☆	PA
COVINGTON	WA4VXW	147.93	147.33	☆	PALK
COVINGTON	N4DRL	147.99	147.39	N	
CROSSVILLE	KE4RX	146.04	146.64	☆	
CROSSVILLE	W4CV	147.93	147.33	N	
CUMBERLAND CITY	N4GMT	144.73	145.33	N	
DAYTON/RHEA CTY	K4ZLA	147.99	147.39	N	
DECATUR-PONE KB	W4RJC	144.55	145.15	☆	
DONELSON	WA4BZU	147.885	147.255	N	TPA
DYERSBURG	AA4HF	146.145	146.745	N	
FAYETTEVILLE	KO4G	146.265	146.865	N	
FAYETTEVILLE	W4NIQ	147.63	147.03	N	PA
GALLATIN	WD4BKY	147.84	147.24	N	L
GALLATIN	WD4BKY	147.87	147.27	N	
GERMANTOWN	KA4ATI	147.69	147.09	☆	
GRAY	WD4SBX	144.65	145.25	☆	A
GRAY	WD4SBX	147.99	147.39	☆	A
GREENEVILLE	K4EPC	144.79	145.39	☆	
GREENEVILLE	WB4TUO	144.81	145.41	N	
GTLBG/COVE MTN	WA4KJH	146.25	146.85	N	LEA
GUTHRIE (TN/KY)	KA4NNE	146.205	146.805	N	
HENDERSON	K4TC	147.705	147.105	N	PAEA
HENDERSONVILLE	WB4WZK	144.67	145.27	☆	PAT
HENDERSONVILLE	N4WF	147.945	147.345	N	
HERMITAGE	WB4DOR	144.79	145.39	N	
HOLSTON MT/E TN	WB4SQC	144.69	145.29	N	PA
HUMBOLDT	NQ4Y	144.75	145.35	N	AL
JACKSON	WB7BOX	144.51	145.11	☆	AL
JACKSON	KF4SC	144.71	145.31	☆	
JACKSON	W4WKZ	147.81	147.21	☆	
JASPER	KD4XX	144.59	145.19	☆	A
JOHNSON CITY	W4ABR	146.19	146.79	☆	A
JOHNSON CITY	KE4FH	147.87	147.27	N	A
KNGSPT/BAYS MT	W4TRC	146.37	146.97	☆	PA
KNOXVILLE	N4IJL	144.51	145.11	N	
KNOXVILLE	W4BBB	144.61	145.21	☆	A
KNOXVILLE	WA4TEM	144.73	145.33	☆	AL
KNOXVILLE	N4GRC	144.77	145.37	☆	
KNOXVILLE	N4IUA	144.83	145.43	N	
KNOXVILLE	WB4GBI	144.87	145.47	☆	
KNOXVILLE	WB4GBI	146.025	146.625	☆	C
KNOXVILLE	WB4GBI	146.34	146.94	☆	
KNOXVILLE	K4TJY	146.46	147.06	N	C
KNOXVILLE	WB4GBI	147.675	147.075	☆	A
KNOXVILLE	W4BBB	147.90	147.30	☆	
KNXVL/CROSS MT	KA4OAK	147.96	147.36	N	
KNXVL/ENG MT	WB4IOB	146.13	146.73	☆	
LAFOLLETTE	KA4OAK	144.53	145.13	N	A
LAFOLLETTE/WMT	K4BGW	146.07	146.67	N	
LAKE CITY	WB4OAH	146.22	146.82	N	
LAVERNE	KJ4RA	144.63	145.23	N	
LEBANON	WD4JVV	147.615	147.015	☆	
LENOIR CITY	KB4PIO	146.085	146.685	N	PA
LEXINGTON	WD4MVR	146.43	147.03	☆	
LOUDON	KE4SK	144.57	145.17	☆	
MANCHESTER	W4UOT	146.10	146.70	☆	PA
MARTIN	WA4ZQX	146.025	146.625	☆	A
MCMINNVILLE	WD4MWQ	146.37	146.97	☆	A
MCMINVL/SHT MT	W4KKO	144.89	145.49	☆	
MEDINA	K4BEZ	146.37	146.97	N	A
MEM/FISHERVILLE	N4DRL	144.65	145.25	N	AL
MEMPHIS	KOJXI	144.55	145.15	N	
MEMPHIS	KAOBRN	144.57	145.17	N	
MEMPHIS	WA4VIP	144.81	145.41	N	
MEMPHIS	K4HAZ	144.85	145.45	N	C
MEMPHIS	WA4KOG	144.89	145.49	N	
MEMPHIS	WB4KQQ	146.04	146.64	☆	
MEMPHIS	W4UFT	146.10	146.70	N	
MEMPHIS	WB4DAZ	146.13	146.73	☆	PA
MEMPHIS	WA4HBY	146.19	147.51	N	NB
MEMPHIS	W4BS	146.22	146.82	N	PA
MEMPHIS	WA4KOG	146.25	146.85	N	A
MEMPHIS	WA4ETE	146.28	146.88	☆	A
MEMPHIS	K4BN	146.34	146.94	D	A
MEMPHIS	K4FZJ	146.40	147.00	N	
MEMPHIS	W4ZJM	146.43	147.03	N	L
MEMPHIS	WA4MQQ	147.66	147.06	N	
MEMPHIS	KA4GMV	147.72	147.12	N	AT
MEMPHIS	WA4KOG	147.78	147.18	N	
MEMPHIS	WA4OWI	147.87	147.27	N	
MEMPHIS	WA4ADT	147.90	147.30	☆	PAL
MEMPHIS	WB4MMI	147.96	147.36	N	
MILLINGTON	W4ODR	146.43	147.03	N	L
MORRISTOWN	WD4PRQ	147.63	147.03	N	EA
MORRISTOWN	WB4OAH	147.825	147.225	N	
MOUNTAIN CITY	WD4OMO	144.87	145.47	N	
MURFREESBORO	WB4LHO	144.57	145.17	☆	PA
NASHVILLE	WA4CGD	144.61	145.21	N	L
NASHVILLE	N4WF	144.69	145.29	N	
NASHVILLE	WD4JYD	144.75	145.35	N	
NASHVILLE	KI4OG	144.77	145.37	☆	
NASHVILLE	N4ARK	144.87	145.47	N	PA
NASHVILLE	WA4PCD	146.01	146.61	N	PA
NASHVILLE	WB4NTM	146.04	146.64	N	T
NASHVILLE	W4PQP	146.16	146.76	N	
NASHVILLE	W4SQE	146.19	146.79	☆	
NASHVILLE	WA4PCD	146.25	146.85	N	PA
NASHVILLE	WA4TOA	146.28	146.88	N	
NASHVILLE	WA4PCD	146.34	146.94	N	
NASHVILLE	K4AYN	147.645	147.045	N	
NASHVILLE	WA4PCD	147.75	147.15	N	
NASHVILLE	WA4PCD	147.78	147.18	N	
NASHVILLE	WB4ZSA	147.90	147.30	☆	PA
NASHVILLE	N4AJS	147.93	147.33	N	
NASHVILLE S.	WB4NTM	147.96	147.36	N	TA
NASHVILLE S.W.	WB4NTM	146.07	146.67	N	ATL
NASHVLE/FAIRVIEW	N4ARK	144.51	145.11	N	
OAK RIDGE	W4SKH	146.28	146.88	N	
OAK RIDGE	W4SKH	146.37	146.97	N	A
OAK RIDGE	K4EAJ	147.72	147.12	☆	
OAK RIDGE	K4EAJ	147.75	147.15	☆	RL
PARIS	K4KLX	147.96	147.36	N	A
PETROS	KJ4SI	147.855	147.255	☆	A
PIKEVILLE	K4MJM	147.885	147.285	☆	
PINSON	WBOTMC	147.87	147.27	N	C
POCAHONTAS	WB4MMI	147.96	147.36	N	
POLK CTY/OSWALD	WD4DES	147.78	147.18	☆	A
PULASKI/MUSIC MT	W4JVO	146.175	146.775	☆	EA
PURYEAR	WA4CEX	147.765	147.165	☆	
ROCKWOOD	WA4RHV	147.615	147.015	☆	AEA
SAVANNAH	WB4DQU	146.31	146.91	N	
SELMER	KF4VM	144.79	145.39	N	CA
SEV/SHIELDS MT	N4CJX	144.67	145.27	N	
SHELBYVILLE	W4QEB	147.66	147.06	☆	A
SHORT MTN	W4YXA	146.31	146.91	☆	
SPARTA/BON AIR	W4BSA	147.69	147.09	N	A
SPRING HILL	NW4E	144.85	145.45	N	A
TRENTON	WB5LIY	144.61	145.21	N	A EA
UNION CITY	WA4YGM	146.10	146.70	☆	A
UNION CITY	WA4YGM	147.615	147.015	☆	ARB
WATERTOWN	KE4WA	146.13	146.73	N	PA
WAVERLY	NO4Q	146.085	146.685	N	
WINCHESTER	N4NCM	146.22	146.82	☆	PA

220 MHZ

BROWNSVILLE	KB4YTU	222.60	224.20	N	
CHATT/SIGNAL MT	WA4ZOK	223.30	224.90	N	
CHATTANOOGA	WD4MQG	223.04	224.64	N	PA
CHATTANOOGA	K4VCM	223.18	224.78	D	A
CLARKSVILLE	KF4GP	222.34	223.94	N	
COLLIERVILLE	KB4YGI	222.80	224.40	N	PAL
FISHERVILLE	N4DRL	223.28	224.88	N	
FRANKLIN	WD4SGS	222.54	224.14	N	
GALLATIN	WB4ZSA	222.38	223.98	☆	
GREENEVILLE	WB4NKM	220.058	220.058	☆	BEA
GREENEVILLE	WB4NKM	223.34	224.94	☆	A
HERMITAGE	WB4RAB	222.30	223.90	N	
JC/BUFFALO MT	WA4UCI	223.18	224.78	☆	
KNOXVILLE	KB4FZK	222.62	224.22	N	C
KNOXVILLE	WA4TEM	222.72	224.32	☆	AL
KNOXVILLE	WA4YON	222.86	224.46	☆	
KNOXVILLE	W4BBB	222.90	224.50	☆	
MEM/FISHERVILLE	N4DRL	222.90	224.50	N	AL
MEMPHIS	W4BS	222.82	224.42	N	
MEMPHIS	WA4KOG	223.18	224.78	N	C
MEMPHS/FRAYSER	W4ZJM	222.34	223.94	N	L
NASHVILLE	N4TB	222.42	224.02	N	
NASHVILLE	WB4UEX	222.48	224.08	N	
NASHVILLE	N4MEY	222.52	224.12	N	C
NASHVILLE	N4AWB	222.62	224.22	N	
NASHVILLE	KI4OG	222.84	224.44	☆	PARB
NASHVILLE	N4MEY	223.06	224.66	N	
NASHVILLE	KI4OG	223.24	224.84	☆	PARB
NASHVILLE	N4PYI	223.34	224.94	☆	PA
SHORT MTN.	KE4NP	222.66	224.26	☆	
SPRINGFIELD	KB8EHB	222.62	224.22	☆	

MORE TENNESSEE REPEATERS

440 MHZ

ALAMO	WB4EDS	448.75	443.75	N	L
BARTLETT	WA4PAJ	449.25	444.25	N	
BENTON/BEAN MT	K4SIR	449.95	444.95	N	T
BRISTOL/HLST MT	K4LSP	449.50	444.50	N	A
BROWNSVILLE	KB4YTU	449.20	444.20		
BROWNSVILLE	KB4YTU	449.45	444.45	N	CPAL
CHATTANOOGA	N4JSR	447.325	442.325	N	
CHATTANOOGA	W4AM	449.10	444.10	N	A
CHATTANOOGA	WB4LRD	449.875	444.875	N	
CLARKSVILLE	KF4GP	449.95	444.95		
CUMBERLAND CITY	N4GMT	448.40	443.40	N	PAT
FAYETTEVILLE	KO4G	448.10	443.10	N	
FISHERVILLE	N4DRL	432.01	BEACON		N
FISHERVILLE	N4DRL	449.30	444.30	N	AL
FRANKLIN	KB4IDB	448.85	443.85	N	
GALLATIN	WD4BKY	449.35	444.35	N	PALT
GALLATIN	WD4KWP	449.45	444.45	☆	
GATLBG/COVE MT	WA4KJH	448.30	443.30	N	L
GREENEVILLE	WB4NKM	449.65	444.65	☆	
HENDERSON	K4TC	449.75	444.75	N	PA
J.CITY/HOLSTN MT	WB4SQC	448.425	443.425	N	
JACKSON	WB4EPG	447.80	442.80	N	A
JACKSON	WB7BOX	449.875	444.875	N	PAEA
JAMESTOWN	N4PTK	448.625	443.625	N	C
JASPER	KD4XV	447.05	442.05	☆	
KNOXVILLE	WA4NTZ	447.50	442.50	N	
KNOXVILLE	WB4GBI	449.30	444.30	N	
KNOXVILLE	KB4KSL	449.50	444.50	N	
KNOXVILLE	KB4NK	449.60	444.60	☆	
LAKE CITY/CRS MT	WD4LUR	448.00	443.00	☆	PA
MEDINA	K4BEZ	447.05	442.05	N	AL
MEMPHIS	N4ERU	421.25	439.25	N	V
MEMPHIS	N4ERU	439.25	421.25	N	ATV
MEMPHIS	WB4EPG	447.625	442.625	N	
MEMPHIS	WF4G	447.825	442.825	N	
MEMPHIS	W4ZJM	448.00	443.00	N	
MEMPHIS	WA4QWW	448.40	443.40	N	A
MEMPHIS	KA5RYF	448.95	443.95	N	
MEMPHIS	KAOBRN	448.975	443.975	N	C
MEMPHIS	WA4ADT	449.00	444.00	☆	T
MEMPHIS	K4RDK	449.025	444.025	N	
MEMPHIS	KA4JXT	449.10	444.10	N	
MEMPHIS	WA4KOG	449.40	444.40	N	
MEMPHIS	KA4IZF	449.50	444.50	N	A
MEMPHIS	KOJXI	449.60	444.60	N	
MEMPHIS	WB4MMI	449.70	444.70	N	T
MEMPHIS	KOJXI	449.80	444.80	N	
MEMPHIS	WB4MMI	449.90	444.90	N	L
MEMPHIS	WA4ETE	449.925	444.925	☆	
MEMPHIS	WB4KQQ	449.95	444.95	☆	T
MILAN	WD4ABJ	447.10	442.10	N	
MORRISTOWN	KA4NEX	449.20	444.20	N	
MORRISTOWN	KD4LP	449.80	444.80	☆	A
MT JULIET	WB4PVB	448.05	443.05	☆	PA
NASHVILLE	KI4OG	449.05	444.05	☆	TPA
NASHVILLE	WB4NTM	449.15	444.15	N	L
NASHVILLE	KI4OG	449.575	444.575	N	C
NASHVILLE	W4AY	449.675	444.675	N	
NASHVILLE	WB4QES	449.775	444.775	N	
NASHVILLE	WB4QES	449.975	444.975	N	
OAK RIDGE	K4EAJ	449.40	444.40	☆	L
OAKFIELD	WA4BJY	447.20	442.20	☆	
PARIS/GROVE HL	WA4WKS	448.50	443.50	N	
PULASKI	KB4TPI	439.250	421.250	N	V
PULASKI	KB4TPI	447.150	442.150	N	
ROCKWOOD	KB4NEI	449.00	444.00	☆	C
SMYRNA	KJ4RM	449.25	444.25	N	

6 METERS

CHATTANOOGA	WB4LRD	52.01	53.01	N	
COOKEVILLE	WA4UCE	52.19	53.19	N	
GALLATIN	WD4KWP	52.45	53.45	☆	L
GREENEVILLE	K4LSP	52.01	53.01	N	
GUTHRIE (TN/KY)	KA4ZKL	52.23	53.23	N	
KNOXVILLE	WA4YON	52.25	53.25	☆	
KNOXVILLE	WB4GBI	52.35	53.35	☆	O
KNXVL/ENG MT	WB4IOB	52.15	53.15	☆	A
MEM/FISHERVILLE	N4DRL	52.27	53.27	N	AL
MEMPHIS	WA4KOG	52.01	53.01	N	
MEMPHIS	K4RDK	52.55	53.55	N	
NASHVILLE	N4ARK	52.525	52.525	N	LRB

10 METERS

DONELSON	WA4BZU	29.54	29.64	N	
JACKSON	NQ4W	29,54	29.64	☆	C
KNXVL/ENG MT	WB4IOB	29.52	29.62	☆	
MEM/FISHERVILLE	N4DRL	29.58	29.68	N	AL
MEMPHIS/FRAYSER	W4ZJM	29.52	29.62	N	
UNION CITY	WA4YGM	29.56	29.66	N	

PACKET

BRISTOL	WX4S-1	145.01	PKET	☆	K
CASTALIAN SPRNGS	WA4PTZ	145.01	PKET	N	K
CHATTANOOGA	W4DSK-1	145.01	PKET	N	K
CROSSVILLE	N4LLD-1	145.01	PKET	N	K
GALLTN/MUSIC MT	WA4PTZ-1	145.01	PKET	N	K
GREENEVILLE	K4VZZ-1	147.48	PKET	N	K
HORNBEAK	WA4VVX-5	145.01	PKET	N	K
JACKSON	WB7BOX-1	145.01	PKET	☆	K
KINGSPORT	N4NBX	145.04	PKET	N	K
KNOXVILLE	KC4OI	145.01	PKET	N	K
KNOXVILLE	WB4YPO-1	145.63	PKET	☆	K
LAKELAND	AI5R	145.01	PKET	N	K
MEMPHIS	WB4KQQ-1	145.01	PKET	☆	K
NASHVILLE	W4HHY	145.01	PKET	N	K
NASHVILLE	WA4KDC-2	145.01	PKET	N	K
NASHVILLE	WA4KDC	433.80	PKET	N	KL
PIKEVILLE	K4MJM-1	145.01	PKET	☆	K
ROCKWOOD	AA4KS-1	147.48	PKET	N	K
ROCKWOOD MT	KB4NK-1	145.01	PKET	☆	K
S.PITTSBURG	KC4CIQ	145.09	SOP	N	K
SEWANEE	WD4CPF-1	145.01	PKET	N	K
SEWANEE	WD4CPF-2	433.80	PKET	N	KL
SHORT MT	W4YXA-1	145.01	SM	☆	K
WAVERLY	WA4VVX-3	145.01	PKET	N	K
WAVERLY	WA4VVX-4	433.80	PKET	N	KL
WINCHESTER	WD4CPF-2	145.01	PKET	N	K

GEORGIA REPEATERS

2 METERS

ADAIRSVILLE	WD4IWL	146.085	146.685	N	
ALBANY	W4MM	144.55	145.15	N	L
ALBANY	W4MM	146.10	146.70	N	
ALBANY	W4MM	146.13	146.73	N	
ALBANY	W4MM	146.22	146.82	N	
ALBANY	W4MM	147.72	147.12	N	K
ALBANY	WB4TFW	147.75	147.15	N	
AMERICUS	K4VBH	147.87	147.27	N	
ASHBURN	WD4EVD	147.885	147.285	☆	PA
ATHENS	WA4BKF	146.145	146.745	☆	PA
ATHENS	K4TQU	147.975	147.375	N	
ATLANTA	W4VTA	144.51	145.11	☆	
ATLANTA	W4AQL	144.55	145.15	N	PA
ATLANTA	K4DRQ	144.69	145.29	☆	
ATLANTA	W4DOC	144.75	145.35	N	
ATLANTA	W4DOC	146.22	146.82	N	PA
ATLANTA	N4OD	146.37	146.97	N	
ATLANTA	WA4NNO	146.40	147.00	N	PA
ATLANTA	K4YSB	147.705	147.105	D	R
ATLANTA	K4SMX	147.795	147.195	N	T
ATLANTA	WD4KDT	147.855	147.255	☆	PAL
ATLANTA/AIRPORT	W4REI	147.63	147.03	N	
ATLANTA/BELL	W4PME	144.81	145.41	☆	
ATLANTA/GPCO	WA4VBX	147.885	147.285	☆	
ATLANTA/MARIETTA	N4NFP	146.055	146.655	N	EAL
ATLANTA/MARIETTA	N4NEQ	147.94	147.34	N	PANB
ATLANTA/SWEAT MT	K4LCI	144.83	145.43	N	EA
ATLANTA/SWEAT MT	KD4NC	146.13	146.73	☆	LK
AUGUSTA	W4TUN	144.51	145.11	☆	A
AUGUSTA	AA4UA	144.77	145.37	☆	A
AUGUSTA	N4JA	144.89	145.49	N	
AUGUSTA	W4LWT	146.04	146.64	☆	K
AUGUSTA	KT4N	146.34	146.94	N	
AUGUSTA	NA4I	146.385	146.985	N	PA
AUGUSTA	NI4S	147.72	147.12	N	PA
AUGUSTA	N4BMA	147.78	147.18	☆	R
AUGUSTA/GRNS CUT	WD4COL	144.63	145.23	N	A
BALDWIN	WD4NHW	147.78	147.18	☆	A
BONAIRE	W4MST	147.615	147.015	N	
BRUNSWICK	KB4PXX	144.81	145.41	N	P
BRUNSWICK	K4TVE	146.13	146.73	N	A

SERA REPEATER SYMBOLS

★	Full Member Supporter	T	Tone Access Repeater
D	Delinquent Membership	L	Linked Repeater
N	Non-Member SERA	K	Packet Operation
NB	Not On SERA Freq. Plan	R	Radioteletype Operation
M	T-MARC Terr. Repeater	V	Television (SSTV or ATV)
A	Autopatch (Open)	P	Proposed Repeater Coord.
PA	Private Autopatch	C	Under Construction
EA	Emergency Autopatch	O	Off the Air Temporarily
		RB	Remote Base System

NOTE: Some repeaters allow voice, as well as other functions on their machine. Generally the second function is indicated, but does not necessarily mean the machine is solely operated in that mode. Operators may check with owners for information. Digipeters within the Packet frequency spectrum are listed under PACKET. Repeaters with normal input/output (pairs) are listed in the regular FM repeater index and their operation of Packet is indicated with "K".

MORE GEORGIA REPEATERS

CAIRO	AA4RD	147.795	147.195	N	
CALHOUN/JASPER	KC4AQS	147.405	146.805	☆	PAL
CARROLLTON	W4FWD	146.04	146.64	☆	A
CARTERSVILLE	N4GIS	144.59	145.19	N	
CEDARTOWN	W4CMA	147.72	147.12	☆	PA
CLAYTON	WA4BLQ	144.65	145.25	☆	
CLEVELAND/LONG	K4FOW	146.31	146.91	N	
CLEVELAND/LONG	K4FOW	147.615	147.015	N	
COLUMBUS	KA4CEK	144.71	145.31	N	
COLUMBUS	W4CVY	146.01	146.61	☆	A
COLUMBUS	WB4TOM	146.28	146.88	☆	
COLUMBUS-RTTY	K4ACH	144.77	145.37	N	R
CONYERS	WB4JEH	144.63	145.23	N	
CONYERS	KE4SG	147.81	147.21	N	PA
COOLIDGE	N4JBF	144.57	145.17	☆	P
CORDELE	WA4RWS	144.89	145.49	☆	
COVINGTON	WA4ASI	146.325	146.925	N	AL
CUMMING/SAWNEE	K4BYK	147.75	147.15	☆	PAL
DALLAS	K4DVJ	146.25	146.85	N	
DALONEGA	KJ4EV	146.835	147.435	☆	A
DALTON	KE4UJ	144.63	145.23	☆	A
DALTON	N4BZJ	144.65	145.25	☆	A
DALTON	N4BZJ	147.735	147.135	☆	EAL
DALTON	KE4LN	147.81	147.21	N	
DECATUR	W4BOC	144.85	145.45	☆	
DOUGLAS	KB4TCU	147.765	147.165	N	
DOUGLASVILLE	KB4EO	147.96	147.36	N	A
DUBLIN	WA4HZX	147.96	147.36	N	
ELLIJAY/TALONA M	W4HHH	146.385	146.985	☆	A
FAYETTEVILLE	K4UWN	146.085	146.685	N	
FOLKSTON	K4DMK	146.19	146.79	N	
FOREST PARK	K4KQK	144.65	145.25	N	
FORSYTH	W4SPJ	147.315	147.915	N	NB
GAINESVILLE	W4NSO	146.07	146.67	☆	PAEA
GRIFFIN	K4HYB	144.79	145.39	☆	PA
GRIFFIN	K4HYB	146.31	146.91	☆	
HARTWELL	KY4T	146.895	146.295	N	EA
HINESVILLE	KF4UM	147.615	147.015	☆	AT
IRWINTON	WB4NFG	147.84	147.24	N	
JASPER	KB4IZF	144.77	145.37	☆	PARB
JASPER	W4OOM	146.10	146.70	☆	
JASPER/MT OGLTHP	KC4AQS	147.405	146.805	N	PA
JEFFERSON	KB4ZUN	147.825	147.225	N	
JESUP	WA4EQL	146.07	146.67	N	
JESUP	N4PJR	146.325	146.925	☆	PA
JONESBORO	WA4DIW	144.57	145.17	☆	EA
JONESBORO	WA4OGE	144.73	145.33	☆	EA
LAFAYETTE	KB4VEK	147.975	147.375	N	
LAGRANGE	KO4R	146.25	146.85	N	O
LAGRANGE	WB4BXO	147.93	147.33	☆	
LANETT(AL)	K4DXZ	147.60	147.00	☆	
LYONS	K4HAO	146.22	146.82	N	
MACON	WB4OLL	144.83	145.43	☆	PALR
MACON	W4BKM	146.06	146.66	N	NBPA
MACON	N3SM	146.895	146.295	☆	
MACON	WA4DDI	147.66	147.06	☆	T
MADISON	WB4DKY	146.265	146.865	☆	A
MARIETTA	WA4QPL	144.89	145.49	☆	PA
MARIETTA	KC4KE	146.175	146.775	N	
MARIETTA	W4YFR	146.28	146.88	☆	
METTER	W4TYM	147.645	147.045	N	AEA
MILLEDGEVILLE	KF4LI	144.55	145.15	☆	PAT
MILLEDGEVILLE	WB4DOJ	146.10	146.70	☆	PAEA
MILLEDGEVILLE	KF4LT	146.205	146.805	N	
MOULTRIE	WD4KOW	146.19	146.79	N	
NEWNAN	K4SEX	144.53	145.13	D	PA
NEWNAN	K4SEX	146.19	146.79	☆	
PERRY	KB4KIN	146.355	146.955	☆	PAL
PERRY	WL7ACY	147.90	147.30	☆	AL
PHENIX CITY (AL)	WA4QHN	146.13	146.73	☆	
PINE MT/HAMILTON	WB4ULJ	144.59	145.19	N	
PRESTON	WB4TOV	146.385	146.985	N	
QUITMAN	WA4NKL	146.28	146.88	N	
RINGGOLD	W4ABZ	146.115	146.715	☆	
ROCKY TOP MT	K5PRE	146.355	146.955	N	
ROME	K4HNM	147.90	147.30	N	
ROME/MT. ALTO	W4VO	146.34	146.94	☆	PA
ROSSVILLE	W4FGQ	144.75	145.35	☆	
ROSWELL	N4CLA	147.66	147.06	☆	EAPA
SAVANNAH	KK4TO	146.10	146.70	D	PAEA
SAVANNAH	W4HBB	146.28	146.88	N	
SAVANNAH	W4HBB	146.37	146.97	N	A
SAVANNAH	KK4TO	147.81	147.21	D	PAEA
SNELLVILLE	WD4JXR	147.675	147.075	☆	PA
ST SIMONS ISL	KA4CVE	147.69	147.09	N	
ST. MARYS	KA4UUB	146.385	146.985	N	
STATESBORO	NC4D	147.705	147.105	N	
STOCKBRIDGE	WA4JDR	144.71	145.31	N	
STONE MT	W4BOC	146.16	146.76	☆	
SUMMERVILLE	KA4LVY	147.825	147.225	N	
SWAINSBORO	K4VYX	146.19	146.79	N	O
SWEAT MT/MARIETT	N4CLA	144.87	145.47	☆	EAPA
SYCAMORE	KF4BI	147.78	147.18	N	
THOMASTON	K4IMK	147.99	147.39	N	
THOMASVILLE	W4UCJ	147.66	147.06	☆	A
THOMPSON	WB4OCB	146.235	146.835	N	C
TOCCOA	KA4DIP	147.93	147.33	☆	
TWIN CITY	N4REB	147.915	147.315	☆	P
TYRONE	W4PSZ	144.61	145.21	N	PA
UNION CITY	WA4UPE	146.025	146.625	N	
VALDOSTA	W4APS	146.16	146.76	N	
VALDOSTA	KBOY	147.735	147.135	N	A
VALDOSTA/TIFTON	WA4VLP	144.53	145.13	N	
VIDALIA	N4JWP	146.025	146.625	☆	A
WALESKA/PNLGMT	KE4PN	144.67	145.27	☆	L
WARNER ROBINS	WB4BDP	146.01	146.61	N	
WARNER ROBINS	W4HON	146.25	146.85	☆	A
WATKINSVILLE	KC4FAD	147.645	147.045	☆	PA E
WAYCROSS	WA4GVG	146.04	146.64	N	
WAYNESBORO	WD4COL	144.63	145.23	N	
WRENS	WB4OCB	146.175	146.775	N	
WRIGHTSVILLE	WA4RVB	146.34	146.94	N	AL

220 MHZ

ATL/CHESTNUT MT	W4DOC	222.96	224.56	N	L
ATLANTA	N4BLR	222.68	224.28	N	
ATLANTA	W4DOC	222.74	224.34	N	
ATLANTA	N4IQR	223.10	224.70	☆	
ATLANTA	KK4C	223.22	224.82	☆	PALR
ATLANTA/BELL	W4ZTL	223.02	224.62	N	
ATLANTA/MARIETTA	N4NFP	222.52	224.12	N	PAL
AUGUSTA	AA4UA	222.60	224.20	☆	P
CANTON	N4KSM	222.92	224.52	N	
CARTERSVILLE	N4GIS	222.48	224.08	N	
CLEVELAND	N4RBT	222.78	224.38	N	
CONYERS	WB4JEH	222.42	224.02	N	
CORNELIA	WS4F	222.50	224.10	☆	
CUMMING/SAWNEE	K4JSR	223.38	224.98	☆	PAL
DALTON	N4BZJ	222.44	224.04	☆	
DALTON	N4KVC	223.14	224.74	☆	EARB
DALTON	N4SLJ	223.18	224.68	☆	
GAINESVILLE	W4NSO	222.30	223.90	☆	P
MACON	W4BKM	223.06	224.66	N	
MARIETTA	WA4QPL	223.30	224.90	☆	
PERRY	WL7ACY	223.24	224.84	☆	AL
PINE LOG MT.	WB4UPC	223.34	224.94	☆	L
ROSSVILLE	KC4EV	223.34	224.94	N	
STONE MT	W4BOC	223.16	224.76	☆	
THOMASVILLE	N4JBF	222.72	224.32	☆	AL
VALDOSTA	W4APS	222.38	223.98	N	
YORKVILLE	WB4UPC	222.34	223.94	☆	
YORKVILLE	WB4UPC	222.46	224.06	☆	L

440 MHZ

ALBANY	W4MM	439.25	427.25	N	
ALBANY	W4MM	449.50	444.50	N	
ATLANTA	W4KIP	439.25	421.25	N	V
ATLANTA	W4DOC	444.825	449.825	N	NB
ATLANTA	WB8LVH	448.50	443.50	N	
ATLANTA	KE4ZV	448.65	443.65	☆	K
ATLANTA	W4DOC	449.45	145.67	N	RB
ATLANTA	WB4UWL	449.50	444.50	N	
ATLANTA	N4WQ	449.625	444.625	N	AO
ATLANTA	WA4NNO	449.925	444.925	N	
ATLANTA	WA4YNZ	449.975	444.975	N	T
ATLANTA/BELL	W4ZTL	449.15	444.15	☆	A
ATLANTA/MARIETTA	N4NEQ	449.775	444.775	N	PAL
ATLANTA/MARIETTA	N4NFP	449.85	444.85	N	PA
ATLANTA/SE	WB8LVH	448.55	443.55	N	NB
ATLANTA/STONE MT	W4BOC	449.25	444.25	☆	
AUGUSTA	N4JA	447.025	442.025	N	
AUGUSTA	NI4S	448.15	443.15	N	O
AUGUSTA	NA4I	449.95	444.95	☆	O
BRUNSWICK	KB4PXX	439.25	421.25	N	V
BRUNSWICK	K4TVE	449.975	444.975	N	
CHATSWORTH	AA4EO	448.00	443.00	☆	
CONYERS	WB4JEH	447.55	442.55	N	
CONYERS	N4EMM	449.75	444.75	N	C
COVINGTON	WA4ASI	447.925	442.925	N	L
COVINGTON	KL7TF	448.75	443.75	☆	L
DALTON	N4BZJ	444.85	444.85	☆	
DECATUR	N3APR	447.20	442.20	N	
DECATUR	WB4LBM	449.20	444.20	N	
ELLIJAY TALONA M	W4HHH	449.70	444.70	☆	
GRIFFIN	WB4GWA	448.90	443.90	☆	PA
HIGH PT/LOOKT MT	KB4VEK	448.45	443.45	N	
JASPER/BIG BUCK	N4OKS	448.80	443.80	N	
LANETT(AL)	K4DXZ	447.05	442.05	☆	
LAWRENCEVILLE	WB4QDX	449.00	444.00	N	
MACON	K4VTT	447.275	442.275	☆	A
MARIETTA	KM4BA	448.60	443.60	N	
MARIETTA	K4PQD	449.05	444.05	N	
MARIETTA	KM4BA	449.325	444.325	N	
MT OGELTHORPE	WB4BFD	449.375	444.375	N	
NEWNAN	N4EBZ	449.675	444.675	N	PA
PERRY	KB4KIN	449.95	444.95	☆	PAL
PHENIX CITY (AL)	WA4QHN	449.20	444.20	☆	
RINGGOLD	KJ4IU	448.925	443.925	☆	
ROCKY FACE	AA4EO	447.175	442.175	N	
ROSSVILLE	N4PLP	447.125	442.125	☆	C

SAVANNAH	KC4AZU	447.70	442.70	N	C
SMYRNA	N4IBW	449.65	444.65	N	
STONE MT	N4MSE	449.025	444.025	N	
SWEAT MT	N4CLA	448.20	443.20	N	
TIFTON	KF4JF	449.35	444.35	N	
TYRONE	K4NEF	449.55	444.55	N	
VALDOSTA	W4APS	449.70	444.70	N	
WALESKA/PNLOG MT	KE4PN	448.85	443.85	★	L

10 METERS

ALBANY	W4MM	29.58	29.68	N	L
ATL/MARIETTA	KK4CC	29.54	29.64	N	L
ATLANTA	WB8LVH	29.52	29.62	N	L
DALTON	N4BZJ	29.58	29.68	★	AL

6 METERS

ATL/MARIETTA	WA4MPW	52.09	53.09	N	
AUGUSTA	K4EDU	52.03	53.03	N	P
CONYERS	WB4JEH	52.55	53.55	N	
LINEVILLE(AL)	WB4VBA	52.07	53.07	N	
PERRY	KB4KIN	52.13	53.13	★	O
PINE LOG MT	WB4UPC	52.05	53.05	★	L

1270 MHZ

ATL/CHESTNUT MT	W4DOC	291.40	271.40	N	

PACKET

ADEL	KF4JF-1	145.01	PKET	N	K
ALBANY	W4MM-1	145.09	PKET	N	K
AMICACOLA MT	WB4GQX-4	145.09	PKET	N	K
ATLANTA/EAST	W4QO-1	145.03	PKET	★	K
AUGUSTA	WD4CNV-1	145.01	PKET	N	K
CLARKSVILLE	W4EAW-1	145.01	PKET	N	K
COHUTTA	W4KAU	145.09	PKET	N	K
COLUMBUS	K4ABT-1	145.01	PKET	N	K
CUMMING/SAWNEE	WB4GQX-1	145.01	PKET	N	K
FAIRMONT	AA4EO-1	145.09	PKET	N	K
FORSYTH	WB4GQX-2	145.01	PKET	N	K
LYONS	N4JWP-1	145.01	PKET	★	K
PERRY	KB4KIN-1	145.01	PKET	★	K
PERRY	KB4KIN-5	145.05	PKET	★	K
PINE MT/HAMILTON	WB4ULJ-1	145.01	PKET	N	K
ROME	NC4G-1	145.09	PKET	N	K
SAVANNAH	N4LLX	145.01	PKET	D	K
SAVANNAH	N4LLX	145.03	PKET	D	K
SAWNEE MT/CUMMIN	WB4GQX-1	223.70	PKET	N	K
SYCAMORE	WD4LYV	145.01	PKET	N	K
SYCAMORE	WD4LYV	145.05	PKET	N	K
WARNER ROBINS	K4AGT-1	145.01	PKET	N	K

WEST VIRGINIA REPEATERS

2 METERS

ALDERSON	WA8AVZ	146.13	146.73	N	
BECKLEY	N8BZS	144.71	145.31	★	L
BECKLEY/EOC	N8FWL	144.77	145.37	★	LA
BECKLEY/FLAT TOP	K8BO	146.25	146.85		A
BLUEFIELD	W8MOP	144.89	145.49	★	PA
BOLT	N8FRV	144.57	145.17	★	L
BRIDGEPORT	WB8DKM	147.72	147.12	★	PAT
BUCKHANNON	N8FHE	144.53	145.13	★	AL
BUCKHANNON	N8FHE	144.81	145.41	★	A
BUCKHANNON	WD8L	146.25	146.85	★	
CHARLES TOWN	N8EIV	146.385	146.985	N	MA
CHARLESTON	W8WHQ	144.83	145.43	★	
CHARLESTON	WB8IFS	146.22	146.82	N	
CHARLESTON	WB8CQV	146.28	146.88	N	
CHARLESTON	KD8TC	147.81	147.21	★	
CLARKSBURG	N8FMD	146.085	146.685	N	
CLARKSBURG	KE8MR	147.915	147.315	N	
CRAIGSVILLE	KD8OG	144.67	145.27	N	L
ELK GARDEN	N8FMD	146.145	146.745	N	
ELKINS	KB8BWZ	146.175	146.775	N	
FAIRMONT	W8SP	146.30	146.90	N	NB
FRANKLIN	W3RUA	147.945	147.345	★	
GASSAWAY	WB8MZI	146.01	146.61	N	
GRAFTON	WD8LNB	147.975	147.375	★	L
GRANTSVILLE	N8FXC	144.85	145.45	N	
HARRISVL/PENSBRO	WB8NSL	147.90	147.30	N	
HORSEPEN MT	NV8H	147.72	147.12	★	
HUNTINGTON	WB8FEQ	144.61	145.21	N	R
HUNTINGTON	W8VA	146.16	146.76	N	A
HUNTINGTON/CHAS	WB8EZR	146.04	146.64	★	
KINGSTON/LICK KB	W8FG	144.87	145.47	★	
LEON	WB8NMT	147.78	147.18	N	
LIBERTY	N8BHP	144.81	145.41	★	
LOGAN	WA8LZR	146.09	147.11	N	NB
LOGAN/SUMERCO	NU8K	147.945	147.345	★	L
LOGAN/WARD RK MT	KJ8E	146.37	146.97	★	PAL
MARMET/BEE MT	K8HDB	144.55	145.15	N	
MARTINSBURG	WA8FSE	144.55	145.15	M	
MARTINSBURG	WB8VAZ	147.855	147.255	M	
MCMECHEN	WA8ULB	146.31	146.91	★	
MORGANTOWN	K8LG	144.83	145.43	N	AL
MORGANTOWN	W8CUL	146.16	146.76	★	PAL
MT STORM	KA8JTH	147.705	147.105	N	L
MULLENS	KC8IT	147.63	147.03	★	LARB
NEW MARTINSVLLE	WB8CSW	147.54	146.94	N	NB
OAK HILL	W8OQC	146.19	146.79	★	EA
PARKERSBURG	WA8CRW	146.37	146.97	★	PA
PARKERSBURG	WA8CRW	147.99	147.39	★	PA
PARSONS	KE8QC	144.73	145.33	★	ALRB
POINT PLEASANT	W8KNM	147.66	147.06	N	
PRINCETON	KA8PNC	146.46	147.06	★	A
PRINCETON	WB8NRK	147.825	147.225	N	AC
PRINCETON/PIPEST	WD8OGY	146.325	146.925	N	A
RAVENSWOOD	WD8JNU	146.07	146.67	N	
RAVENSWOOD	WD8JNU	146.10	146.70	N	R
RICHWOOD	WB8YJJ	144.59	145.19	N	
SALT ROCK	WD8MCR	144.51	145.11	N	
SCOTT DEPOT/COAL	N8BHP	147.87	147.27	★	PAEA
SHERRARD	KD8GL	146.115	146.715	★	EAPA
SPENCER	N8APG	147.705	147.105	N	
SPRUCE KNOB	N8HON	147.885	147.285	★	L
ST ALBANS	WB8GDY	146.40	147.00	★	
ST ALBANS	KA8SVR	147.75	147.15	★	PAL
ST ALBANS	K8WMX	147.975	147.375	★	R
ST MARYS/BENS R	WB8ECC	147.63	147.03	N	L
SUMMERSVILLE	K8VKB	146.34	146.94	★	
TERRA ALTA	KD8ZR	147.60	147.00	★	PA
WEIRTON	KC8JN	146.34	146.94	N	A
WELCH	WB8SXZ	144.85	145.45	N	
WESTON	WD8EOM	144.79	145.39	N	PAL
WHEELING	WB8JGY	144.59	145.19	★	PAL
WHEELING	W8JDH	146.16	146.76	N	
WILLIAMSON	KE8FR	144.73	145.33	★	ARB
WINTERPL/FLT TOP	N8BZS	146.025	146.625	★	AL

220 MHZ

FLAT TOP	N8BZS	222.46	224.06	★	
KINGSTON/LICK KB	W8FG	223.14	224.74	★	
PARSONS	KE8QC	222.88	224.48	★	ALRB
WILLIAMSON	KA8YYW	222.54	224.14	★	

440 MHZ

BECKLEY	N8BZS	449.40	444.40	★	AL
BUCKHANNON	N8FHE	448.10	443.10	★	L
GRAFTON	WD8LNB	447.20	442.20	★	L
HUNTINGTON	WB8EZR	449.60	444.60	★	C
JANE LEW	N8FMD	449.875	444.875	N	
KINGSTON/BKLY	N8FRV	449.80	444.80	N	L
MORGANTOWN	K8LG	449.70	444.70	N	L
MORGANTOWN	W8CUL	449.80	444.80	★	PAL
MOUNDSVILLE	KY8O	439.25	421.25	N	V
MULLINS	KC8IT	449.00	444.00	★	LRB
PARSONS	KE8QC	449.65	444.65	★	ALC
S. CHARLESTON	WB8CQV	449.95	444.95	N	
SPRUCE KNOB	N8HON	449.175	444.175	★	

10 METERS

PARSONS	KE8QC	29.55	29.65	★	TLC

6 METERS

BOLT/BOLT MT	N8DKL	52.05	53.05	N	
ST ALBANS/COAL	WD8JKA	52.03	53.63	N	ATNB
ST.ALBANS	KA8SVR	52.15	53.15	★	PAEA

PACKET

HUNTINGTON	KA8EUU-1	145.01	PKET	N	K
LOGAN/BLAIR MT	WB8FQJ-1	145.01	PKET	N	K
MCMECHEN	WB8ZTV-1	145.01	PKET	N	K
PARKERSBURG	WA8CRW-1	145.01	PKB	★	K
SCOTT DEPOT/COAL	N8BHP-1	145.01	PKET	★	K
WILLIAMSON	KA8YYW-1	145.01	PKET	★	K

SERA REPEATER SYMBOLS

★	Full Member Supporter	T	Tone Access Repeater
D	Delinquent Membership	L	Linked Repeater
N	Non-Member SERA	K	Packet Operation
NB	Not On SERA Freq. Plan	R	Radioteletype Operation
M	T-MARC Terr. Repeater	V	Television (SSTV or ATV)
A	Autopatch (Open)	P	Proposed Repeater Coord.
PA	Private Autopatch	C	Under Construction
EA	Emergency Autopatch	O	Off the Air Temporarily
		RB	Remote Base System

EAST KENTUCKY REPEATERS

2 METERS

ASHLAND	KD4SN	146.34	146.94	☆	
ASHLAND	KA4DII	147.84	147.24	☆	PA
ASHLAND	WA8KWH	147.93	147.33	☆	A
DEANE	AK4U	144.61	145.21	☆	L
DICKS KNOB	N4MWA	147.765	147.165	N	
ELKHORN CITY	WB4WAU	147.60	147.00	☆	
GRAYSON	KF4JO	146.10	146.70	N	
GUTHRIE	KA4NNE	146.205	146.805	☆	
HARLAN	WM4R	144.75	145.35	N	
HAZARD	K4VHF	146.07	146.67	☆	
JENKINS	WD4PDJ	147.99	147.39	N	
LEXINGTON	KC4TX	144.85	145.45	☆	PA
LOUISA	WA4SWF	146.13	146.73	☆	EA
LYNCH/BLACK MT	N4IZD	147.945	147.345	N	
MAYTOWN	AK4U	146.28	146.88	☆	L
MIDDLESBORO	W4PPM	144.63	145.23	N	
MOREHEAD	K4GFY	146.31	146.91	N	
MT. STERLING	WD4KNE	147.93	147.33	☆	PA
PAINTSVILLE	AK4U	146.19	146.79	N	PAL
PHELPS	KJ4YK	147.69	147.09	☆	
PIKEVILLE	N4IWZ	144.55	145.15	☆	PARB
PIKEVILLE	N4IXA	146.25	146.85	N	EAL
PIKEVILLE	WB4GEL	147.87	147.27	N	PA
PINEVILLE	WA4YZY	146.04	146.64	N	
PRESTONSBURG	K4ICN	144.69	145.29	☆	RB
SALYERSVILLE	AK4U	147.90	147.30	N	L
WASHINGTON	WA4WMM	144.87	145.47	N	C
WINCHESTER	WB4ASZ	147.72	147.12	☆	

220 MHZ

ASHLAND	KC4QK	222.34	223.94	☆	
PIKEVILLE	WB4F	222.98	224.58	N	
PIKEVILLE	N4ETG	223.02	224.62	N	A

440 MHZ

ASHLAND	WB4TAT	449.975	444.975	☆
LYNCH/BLACK MT	N4IZD	448.10	443.10	N

6 METERS

FLAT GAP	N4MPM	52.45	53.45	N	
GUTHRIE	KA4ZKL	52.23	53.23	☆	C

PACKET

ASHLAND	KD4SN-1	145.01	ASH1	N	K
ASHLAND	KA4ROS	145.01	BBS	N	K
ASHLAND	KD4SN	145.01	ASH1	☆	K
ASHLAND	KD4SN-2	446.50	PKET	☆	K
ASHLAND	KD4SN	446.50	ASH2	☆	K
BEREA	N4AQI-1	145.01	BER	N	K
ELIZABETHTOWN	W4BEJ-1	145.01	ET	N	K
ELKHORN CITY	WB4WAU-1	145.01	PKET	☆	K
FALMOUTH	WB9TPG-2	145.01	FM	N	K
FRANKFORT	KB4AGA-1	145.01	FFT1	N	K
FRANKFORT	KB4AGA	145.01	PKET	N	K
FRENCHBURG	W4AUZ-3	145.01	FBG	N	K
GREENSBURG	N4ICS	145.01	PKET	N	K
HAZARD	K4AVX-1	145.01	HAZ	☆	K
HAZARD	K4AVX	145.01	HAZ		K
LEXINGTON	WA4JAV-BB	145.01	PKET	N	K
LEXINGTON	KF4NB-BBS	145.01	PKET	N	K
LEXINGTON	W4AUZ-1	145.01	LEX	N	K
LEXINGTON	KF4NB-BBS	145.09	PKET	N	K
LOUISA	WA4SWF	145.01	LOU	☆	K
LOUISVILLE	W4MOP-1	145.01	PKET	N	K
PRESTONSBURG	WA4FHK	145.01	PBRG	☆	K

WEST KENTUCKY REPEATERS

2 METERS

BROOKS	W4BDC	146.10	146.70	☆	
COVINGTON	WB8NON	144.81	145.41	☆	
COVINGTON	WB8NON	147.99	147.39	☆	A
CUSTER	KE4NS	147.99	147.39	☆	A
ELIZABETHTOWN	W4BEJ	146.38	146.98	☆	AL
GLASGOW	KA0BKD	144.81	145.41	☆	L
HOPKINSVILLE	WA4ZVL	147.63	147.03	☆	A
LAWRENCEBURG	KK4PL	144.69	145.29	☆	A
LOUISVILLE	N4NMC	147.67	147.07	☆	PA
NICHOLASVILLE	WB4CWF	144.89	145.49	☆	
SHELBYVILLE	KE4LR	147.60	147.00	☆	PA
SPRINGFIELD	WA4SJH	147.90	147.30	☆	PAEA

220 MHZ

LEXINGTON	WB8VMI	222.14	223.74	☆

440 MHZ

CUSTER	KE4NS	449.975	444.975	☆	
ELIZABETHTOWN	W4BEJ	449.80	444.80	☆	L
LOUISVILLE	WA4MLF	447.50	442.50	☆	AL
LOUISVILLE	KA4WTT	449.10	444.10	☆	PA
SPRINGFIELD	WA4SJH	444.60	449.60	☆	

PACKET

ELIZABETHTOWN	W4BEJ-1	145.03	PKET	☆	K
HOPKINSVILLE	WA4ZVL-1	145.01	PKET	☆	K

MISSISSIPPI REPEATERS

2 METERS

BOONEVILLE	WA5TEF	146.175	146.775	☆	
CORINTH	WB5VOJ	146.325	146.925	☆	
ELLISVILLE	N5DWU	146.07	146.67	☆	PAL
LAUREL	WV5D	146.01	146.61	☆	A
LAUREL	WV5C	146.01	146.61	☆	
MAGEE	KA5LNY	147.90	147.30	☆	
MENDENHALL	K5HYE	144.51	145.11	☆	
MERIDIAN	KA5MJM	146.37	146.97	☆	
NATCHEZ	W5KHB	146.085	146.685	☆	
OCEAN SPRINGS	W5LDD	147.63	147.03	☆	
PHILADELPHIA	N5EPP	147.93	147.33	☆	
VICKSBURG	WJ5L	144.69	145.29	☆	
WIGGINS	KB5DZJ	144.67	145.27	☆	

440 MHZ

LAUREL	AJ0X	448.50	443.50	☆	ARB
MERIDIAN	WA5WUX	449.10	444.10	☆	

PACKET

MENDENHALL	K5HYE	145.01	PKET	☆	K

6 METERS

ELLISVILLE	N5DWU	52.01	53.01	☆	PAL

SouthEastern Repeater Association, Inc.

THE SERA OFFICIAL REPEATER INDEX

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Repeater owners are reminded to contact their local Frequency Coordinator (Director) for assistance in coordination, changes in their listings, or any other requirements.

ONLY ICOM COULD BUILD THIS MANY FEATURES INTO SUCH A TINY RADIO

DC Socket For Charging and Mobiling
24 Hour Clock With Timer
48 Memories
Easy Knob or Keypad Frequency Selection
Optional Battery Packs Vary Size, Power Output
ICOM
IC-2SAT
144MHz FM TRANSCEIVER

ICOM'S AMAZING NEW MINI FM HANDHELDS

ICOM's new **"S Series"** mini handhelds deliver top performance on the 144, 220 and 440MHz bands with super easy operation and a kaleidoscope of features. Built to fit your needs today, tomorrow, anywhere and anytime.

Wide Frequency Coverage. Plenty of overlap for scanning, monitoring, CAP and MARS use. IC-2SA/IC-2SAT: 138-174MHz Rx, 140-150MHz Tx. IC-3SAT: 220-225MHz Rx/Tx. IC-4SAT: 440-450MHz Sx/Tx.

Flexible Size And Power. The IC-2SA packs 2.5 watts with supplied BP-82. The IC-2SAT, 3SAT and 4SAT's internal battery packs 2 watts of output on high power. All models deliver five watts when powered via optional BP-85 battery pack or via top-mounted 13.8 volt socket. A small rig with a big punch! **48 Memories.** Store your present frequencies and expand your future interests. Offset frequencies are independently programmed in memory channels 0-9. Memories 10-47 use offset frequency contents of the VFO. Also includes soft-sector memory masking. Use only the number of memories you need! **Band and Memory Scanning** with programmable limits, memory skip function, plus selectable pause times while scanning. Additional features include: **Automatic Power Shut-off.** Built-in programmable timer automatically switches off transceiver when you forget. **Optional DTMF Paging Function.** Silently monitors any selected frequency for your preprogrammed 3-digit DTMF-keyed calls, then beeps and displays calling station's code. All ICOM's **"S Series"** handhelds are supported by an extensive line of optional battery packs, chargers, cases, speaker/mics and other accessories. See the exciting new ICOM mini-series handhelds at your authorized ICOM dealer today!

ICOM America, Inc., 2380-116th Ave. N.E., Bellevue, WA 98004
Customer Service Hotline (206) 454-7619
3150 Premier Drive, Suite 126, Irving, TX 75063
1777 Phoenix Parkway, Suite 201, Atlanta, GA 30349
ICOM CANADA, A Division of ICOM America, Inc.,
3071 - #5 Road, Unit 9, Richmond, B.C. V6X 2T4 Canada

All stated specifications are subject to change without notice or obligation. All ICOM radios significantly exceed FCC regulations limiting spurious emissions.

ICOM
First in Communications

F&M ELECTRONICS
FRANK - N4AZM MAE - KB4LMX

● Parts ● Accessories ● Microphones ● Batteries ● Books ● Antennas

3520 ROCKINGHAM ROAD NORTH
GREENSBORO, N.C. 27407
(919) 299-3437

10:00 a.m. to 7:00 p.m. Daily. Closed Mondays.

• AEA • ALPHA DELTA• ARRL• ASTRON
• B & W • BENCHER• CALLBOOKS
• CUSHCRAFT• DAIWA • ICOM
• KENWOOD • LARSEN • MFJ • rf CONCEPTS
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• AND MORE.

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Come visit us at our new store located just 1 block east of Independence Mall.

ELECTRONIC SPECIALISTS
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3830 Oleander Drive
Wilmington, N.C. 28403

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Tuesday - Thursday 10 - 5:30 p.m.
Friday 10 - 7:00 p.m.
Saturday 10 - 3:00 p.m.

919-791-8885

Dwight - k4YNY
Shirley - N4LFV

We accept Visa, Mastercard, American Express, UPS COD, check or cash.

REPEATER JOURNAL ADVERTISING RATES

Effective 1 January 1987

The Repeater Journal is a 3 column magazine with overall page dimension of 8½ x 11 inches. Our page size enables a wide variety of ad sizes from full page down to one column inch size.

Column Widths are 1 col: 2-1/4-in., 1-1/2 col: 3-1/2-in., 2 col: 4-5/8-in., 3 col: 7-1/8-in. Ad widths will be based only with the specified column widths.

DEADLINES: New advertising copy or ad changes must be in the hands of our Advertising Manager no later than the 20th of the month on the 2nd month prior to publication. We cannot guarantee insertion of ads after deadline, although every effort will be made to accomodate.

ADVERTISING DEADLINES

FEB. Issue–Dec. 20	MAY Issue–Mar. 20
AUG. Issue–June 20	NOV Issue–Sep. 20

Advertising copy MUST be mailed to:
REPEATER JOURNAL ADV. MANAGER,
SHARON WARD, 5573 Vienna-Dozier Rd.,
Pfafftown, N.C. 27040.

The REPEATER JOURNAL cannot be responsible for errors in advertising, or held accountable for equipment or accessories that do not live up to the advertised claim. We are not responsible and cannot guarantee insertion of advertising received after deadline.

REPEATER JOURNAL advertising rates apply to exact size, camera ready copy. We can provide typesetting and reduce art for your ad at our cost. Composition and typesetting for full page ad approximately $25 to $28. Half page ad from $12 to $15. Reduction of artwork for ad with no type needed is $4.50. COLOR: One additional spot color, on available color pages is available for an additional $25.00 charge per ad. FULL COLOR: Is available on the Inside Front and Inside Back covers. 100-130 Line separation negatives, right reading, emulsion down are required. No extra charge for full bleed. Due to Journal width being 1/4-in wider than national magazines, the color will bleed to outer edge, with a color stripe on inner edge of page, if separations do not fill width.

The Repeater Journal layout size is very close to most National magazines. If you wish to use a page from one of the magazines, to promote your product, we can reshoot on the camera, insert your store name and customize for your particular application. Be sure to submit a clean, unwrinkled copy of the magazine page.

Contract advertising may be billed quarterly at the request of Advertiser. No volume discounts or contract discounts are available. It is the advertisers responsibility to cancel or request changes in advertising at the time he pays his bill, or before ad deadline, otherwise, advertising will be repeated until further notice.

BUSINESS CARDS, CLASSIFIED ADS AND HAMFEST advertising must be sent accompanied by full payment for insertion. Advertisers who have not paid for previously published advertising before upcoming issue deadline, cannot have any advertising inserted until account is paid in full.

REPEATER JOURNAL ADVERTISING SIZES AND RATES

Ins. Frt. or Ins. Bk. Cover (Full Color)	8-1/2"x11"	$300.00
Full Page	7-1/8" x 9-7/8"	85.00
Full Page Bleed (any sides)	8-1/2" x 11"	100.00
2/3 Page (Vertical)	4-5/8" x 9-7/8"	65.00
1/2 Page (Horizontal)	7-1/8" x 4-3/4"	48.00
1/2 Page (Vertical)	3-1/2" x 9-7/8"	48.00
1/2 Page (Vertical 2-col)	4-5/8" x 7-1/8"	48.00
1/3 Page (Vertical Only)	2-1/4" x 9-7/8"	35.00
1/4 Page (Vertical Only)	3-1/2" x 4-3/4"	28.00
1/6 Page (Vertical)	2-1/4" x 4-3/4"	18.00
1/6 Page (Horizontal)	4-3/4" x 2-1/4"	18.00
1/12 Page (Vertical Only)	2-1/4" x 2-1/4"	10.00
Business Cards - Standard Size	(4 Issue Contract Only)	16.00 In Advance

Classified Ads (30 Words Maximum per ad) In Advance 3.00
Color (1 additional color plus black) An Size Ad 25.00

Sizes listed above are width by length in that order. Ads which run lengths between sizes listed above will be billed according to column inch rate at midpoint. Prices above are for exact size, camera ready positive photoprint, or pasteup. Camera work, typesetting additional. No charge for layout.

Not $300 a page, Not even $200 a page. The Repeater Journal advertising rates and circulation provide you the best dollar value of any Amateur advertising medium in the Southeast. Repeater Journal Advertising PAYS FOR ITSELF! Big circulation National Magazines are Great for results, but do the results pay for the high cost of advertising. Concentrated circulation, low rates, all give the Repeater Journal advertiser the most for his dollar. Call or Write our Advertising Manager today!

The Repeater Journal is Published Quarterly - Feb., May, Aug., Nov.

Yes! I Want to Support SERA - Sign Me UP for the Journal!

SERA ASSOCIATE MEMBERSHIP APPLICATION

Name ________________ Call ________

Address ________________ Date ________

City ________________ Zip ________

Phone (____)________ Member ARRL ( ) Yes ( ) No

Enclosed is $ ______ for ______ Year(s)

(Check Appropriate Box Below)

NEW _____ RENEW _____ HOT-P _____

$6.00/Year (Maximum 2 Years)
(Journal mailed 3rd Class)

$10.50/Year (Maximum 1 Year)
(Journal mailed 1st Class)

Mail Application & Fee To:
SERA Associate Membership
Post Office Box 24292
Winston-Salem, N.C. 27114-4292

You Will Receive the Next Journal

RJ-8/89

Support Your Official COORDINATOR! Join SERA Today!

Make a copy of this application and pass it to a friend. Encourage him to help support the coordination council that for 17 years has worked to keep your repeater in the clear. Your membership guarantees a continuation of this work. Associate Members (repeater users) will receive the REPEATER JOURNAL quarterly. If you are a present Associate Member, you may use this application to renew, change address, or change callsign.

Deadlines for membership are the 15th of the month prior to Publication, to receive the next upcoming Journal. (Jan. 15, Apr. 15, Jul. 15 and Oct. 15). Applications received after deadline will receive the next Journal 3 months away.

"Become Enlightened, Not Lightning'd!"
RC-96 Repeater Controller
acc advanced computer controls, inc.

Flash! The RC-96 Repeater Controller two year warranty now includes lightning coverage.

The '96 is tough. A three-terminal gas discharge tube across the phone line and transient supressors on each input and output signal stop lightning from taking your system down. The '96 is so well protected that its proven performance in the field allows us to offer two year warranty coverage which includes damage caused by lightning!

You'll hear thunderous applause when you install a '96 controller on your repeater. Remote programming will let you easily make changes to your repeater from anywhere without a trip to the hill. Change codes, autodial numbers, ID and tail messages and more, with reliable storage in E²PROM memory.

Your users will be thunderstruck by the outstanding patch and autodialer, with room for 200 phone numbers. The talking S-meter will let them check their signal strength into the repeater. Remote base support for up to six bands allows linking your repeater to others. Plus support for pocket pagers and a bulletin board.

Your technical crew will light up when they see the built-in keypad and indicators. And the ease of hookup with shielded DIN cables. With pots and DIP switches easily accessible at the rear of the unit.

Rugged, capable, easy to hook up. The RC-96 Repeater Controller – an enlightening experience for your repeater.

acc advanced computer controls, inc.

2356 Walsh Avenue, Santa Clara, CA 95051 (408) 727-3330

2 DAYS ONLY

WILLIAMS PRESENTS "CRAZY" CUT THROAT DAYS!!

Every Alinco Radio At Cut Throat Prices

AUGUST 26th and 27th - 9:00 A.M. to 9:00 P.M. Daily

One Weekend Only! - 24 C-R-A-Z-Y Hours!

Have you ever been fortunate enough to attend a hamfest, where "blood ran down the isles" - all the dealers were practically "giving" away their radios. Alas, you didn't buy, but wished you had. Or you didn't go to the hamfest, and only heard about it.

Well, Williams is going to give you one more chance.

For one weekend only, Williams is going to sell all Alinco models at "Cut Throat" prices. Prices we guarantee you may never see again. This will be our one and only sale of this type in the foreseeable future (we can't afford it!)

Alinco DJ-100T
2M Micro H/T
10 mem. LCD. Dir. DC operation. Tiny but full of features.
Regular Sale Price $259
DJ-200T for 220 Mh
also priced Crazy low!
Reg. $279
Cut Throat Priced! **CENSORED**

Alinco DJ-500T
Dual Band H/T
Small, big batt. 20 channels, Dir. DC, great features!
Regular Sale Price $439.00
Cut Throat Price! **CENSORED!**

Alinco DR-510T
2M/440 Dual Bander
45W and 35W
One of the best on the market today. Small, well built. Cross band repeat.
Regular Sale Price $549.00
Cut Throat Priced! **CENSORED!!**

Alinco DR-110T
2-Meter Transceiver
45-watts, small, compact Scan, parogram, all Bells and Whistles
Regular Sale Price $379.00
Cut Throat Priced! **CENSORED!!**

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Technical

Lightning Protection

by Carlton Moseley, W4YVY and Lonnie Pridgen, WB4BZZ

Lightning cannot be prevented; it can only be intercepted or diverted to a path which will, if well designed and constructed, not result in damage or hopefully, restrict any damage to a minimum. Nothing, though, will prevent damage from a direct hit.

The best protection from lightning is to completely disconnectall equipment. This includes disconnecting all antenna leads, all AC power cords, all telephone lines, and any other connections that may exist.

In addition, other means of protection are available that will minimize the adverse effects of a nearby strike. Some of these means are presented below. They cannot guarantee protection, but do incorporate accepted engineering principles of protection for electronic equipment. These means are presented as individual sections which may be used alone (such as tower grounding) but when two or more sections are utilized, the degree of protection increases. No one section is presented as being more important than another.

Section I Bondings

A most important step in minimizing lightning damage is to bond (connect) together all grounds.

Shock or damage is caused by the difference in potential between two points. If all leads to a piece of electronic equipment could be bonded together, then a difference in potential could not exist in or across the equipment and no current would flow. It is usually practical to bond together all leads but those leads that are ground leads can be bonded together.

Notice in the above paragraph that no comment was made about grounding, particularly to ground rods. Ground rods will give a ground connection, but they will not prevent a difference of potential. Ground rods have a resistance to ground. When a current flows through this resistance, a voltage is developed across the resistance. Where two or more grounds or ground connections exist, different currents and resistances to ground can cause different voltages to develop.

Because there can be different potentials between ground rods and between them and other ground connections, just grounding in itself is not always the answer. What will improve all of this is to bond all ground rods and other ground connections together, equalizing any difference of potential (voltage) between them. Bond with an adequately size wire, preferably at #6 AWG or larger.

The electrical and mechanical aspects of bonding are very important. There is much more involved than just running a wire between two points.

The electrical aspect of bonding involves the inductance and resistance of wire. It is often overlooked or not considered but a piece of straight wire has inductance. The inductance is small and is about the same value for a wide range of wire sizes but it is there. When a wire is coiled, the inductance multiplies many times. Since one of the properties of inductance is that it opposes a change in current, it is important to keep the inductance of a bond wire as small as possible. In order to keep the inductance of a bond wire to the minimum value possible, always run bonding wires in the straightest, most direct manner possible. Since a surge of lightning does not like to make sharp turns, this is another reason to run bond wires in the straightest, most direct manner possible. Any necessary turns in a bond wire should be in as large a sweeping curve as possible.

The resistance aspect of a bond wire is important in that it must have a low enough resistance to handle normal currents; yet under surge conditions, the inductance of a wire is the controlling factor. In a wire, currents of 100 amperes or less are mainly affected by the resistance of a wire; currents above 200 amperes are mainly affected by the inductance of a wire, between 100 and 200 amperes, both resistance and inductance affect current flow. Do not forget in all of this that a lightning surge can produce thousands of amperes current flow.

The mechanical aspect of a bond wire has two concerns. The first concern is to have a good connection. A welded connection is the best. A strong mechanical connection could also be used. Never rely on a soldered connection. A surge of current caused by lightning can vaporize the solder, and leave no connection.

The second mechanical concern also touches on an electrical aspect. Whenever a wire is encircled by a piece of metal, the inductance presented by the wire is multiplied. If a bond wire is routed through a metal pipe or is encircled by a metal clamp, the inductance presented by the wire will go up and thus impede a surge of current. If a bond wire must be routed through a metal pipe, it must be bonded to the pipe at both ends so that the pipe will now become the main current carrier. However, routing through a metal pipe can be a problem though. If a joint in the pipe should become loose or open, the pipe can no longer conduct and will act as a large inductor.

Section II. Towers

Towers act like lightning rods. Even if a tower is not hit directly, large currents may be induced from nearby strikes.

To ground a radio tower, each leg of a tower should have its own ground rod placed about two or three feet from the tower and equally spaced around the tower. A bare or tinned #6 AWG copper wire should be run from each tower leg to its ground rod, and a welded or mechanical connection made. If the connection is to be buried (such as the connection to the ground rod), a welded connection would be first choice. A corrosion proof mechanical connection would be second choice. To complete the grounding, a circle of #6 copper wire should be used to connect all ground rods equalizing any potential difference that may develop between rods.

For a guyed tower, ground the base of the tower as above. The guys will be grounded when connected to metal screw anchors. If metal screw anchors are not used, then a ground rod should be placed at the anchor point and bonded to the guys. A copper wire connecting all anchors and/or ground rods together should encircle the perimeter of the guywires.

Another grounding connection for towers, if available, should be a ground electrode system. Ground electrode systems will be covered in Section IV.

Any coax cable or rotor leads coming down a tower should be routed inside the tower. Wires inside of a tower will receive some shielding by the tower. If leads are routed outside of a tower, they should be coupled to the tower at least every 3 or 4 feet with metal hose clamps.

Any "ground" lead coming down a river (coaxial cable shield, etc.) should be bonded to the tower at the base. This is to equalize potentials between the base of the tower and the down leads. Also, it will help drain off any surge that may have been picked up by a down lead (such as a coaxial cable).

Section III Lead-In Wires

Coaxial cable, rotor leads, and/or any other leads that go between a tower and a radio shack can be a path for surge currents to enter a shack.

Earlier in this article (Section I) it was mentioned that wires should be run in the most direct route to reduce inductance, since inductance opposes surge currents. Inductance can be used to an advantage

Continued on Page 41

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Lightning Protection

Continued From Page 40

on lead in wires. If inductance is placed in lead in wires between a radio tower and a radio shack, it will oppose surge currents that may want to travel from a tower into a shack. This inductance can be a lead in, coiled up like a water hose, or a piece of galvanized pipe with the lead in wire routed through it. If a lead in is coiled up, use 5 or more turns. If a lead in is routed through a pipe, do not ground the lead in to the pipe; in this case, it is desired to have it act as an inductor. Making coils of lead in wires or routing them through metal pipes applies to coaxial cables and rotor leads, but not to ladder lines or to twin lead lines.

Section IV Ground Electrode System

A Ground Electrode System (GES) is a grounding arrangement in which all possible grounds are bonded together to form the lowest resistance connection possible to earth. This involves bonding together all metal cold water pipes, a ground ring (discussed below), the power company multi-ground neutral, any metal buildings, etc. Use as many connections as possible. A GES can now serve as a common ground point to which all other grounds connections can be bonded. If a ground ring is used as part of a GES, it will help equalize potential differences that can exist in an area.

A ground ring, mentioned in the paragraph above, is a circle of bare or tinned wire around a house and/or building. Ground rods are placed at corners of the ground ring and connected to it. Additional ground rods may be used, but there should always be 8 or more feet between ground rods. If a ground ring is used and the tower grounding arrangement discussed in Section II is used, the two should be bonded together to equalize potentials.

The National Electric Code (1987 edition) states that a ground ring should consist of bare #2 AWG copper wire in order to have adequate current carrying capability. It also calls for all wires and the top of all ground rods to be buried at least 30 inches in the ground to help prevent damage by anyone digging in the area.

Section IV Ground Window, Isolated Ground Zones, and Single Point Grounds

Damage to electronic equipment takes place when a potential difference exists between one point and another. If all connections can be brought in the same side of a piece of equipment or an area, potentials can hopefully be controlled so that a current path is not provided through the equipment or area.

An isolated area in a shack can be set up so that **all** leads into the area enter at the same point and all "ground" leads are bonded together where they enter, and then bonded to ground. If no other connections are made to the specified area, then the area can be classified as an Isolated Ground Zone (IGZ). The term IGZ refers to the fact that all leads enter at one location (called a Ground Window (GW)) and that all ground leads are bonded together to a single point at the GW. This one point where all grounds come together is called a Single Point Ground (SPG). Now if an IGZ is established using a GW which has a SPG, a path for surge currents will not exist inside the IGZ. This prevents potential differences from existing between pieces of equipment or within a piece of equipment in the IGZ.

To establish an IGZ, first pick a spot to be designated a GW. This is an imaginary window opening such as a circle one foot in diameter. **All** leads entering the IGZ must be close enough together to pass through this opening, and all grounded conductors at this point are bonded together to the SPG. These grounded connectors will include the coaxial cable shields. In addition, electrical AC service to anything in the IGZ must enter through the GW, and at that point, the green wire safety ground must be bonded to the SPG. The result of using a GW with a SPG is that any currents surging over ground leads will flow away to be dissipated, and no current will flow through any equipment. It is possible that a current flow will take place, but with equipment in an IGZ bonded to a SPG, no current will have a path to ground through any equipment.

A SPG can consist of a metal bar. In order to ground a coaxial cable shield to it, mount a coax bulkhead connector on the bar. By attaching a coaxial cable to it, the cable shield will be grounded to the SPG.

A direct bond wire should be run from a SPG to a ground electrode system, a tower ground, or any other established ground point.

Section VI Miscellaneous

Ground rods should be at least 8 feet long. In order to prevent corrosion, ground rods should be copper plated or galvanized.

It is recommended that all bond wire be #6 AWG or larger. If a bond wire can be contacted by a person, it should be insulated.

Finally, as mentioned at the beginning of this article, these recommendations will help prevent damage from lightning, but nothing will protect from a direct hit. Therefore, **disconnect when not in use.**

References:

CQ *Dec. 1987 page 76 "A Lightning Protection For Your Shack" by Peter Altman KO9G*

QST *Feb. 1982 page 35 "Protect Your Equipment From Lightning Damage And Power Line Transients" by Ken Stuart W3VVN and Gene Collick W8LEQ*

(Feedback **QST** *May 1982 page 43)*

Be Careful Where You Operate

We still hear complaints from repeater owners. Persons working their "secret" simplex frequency is on the repeater's input, or 5 or 10 khz away. Obviously their signals are heard by the repeater, and are re-broadcast for miles, probably without their knowledge.

If you utilize frequencies other than the standard recommended simplex frequencies, be sure of what you are doing, and where you are; or your "private" conversations might turn into something embarassing to you and some unsuspecting repeater owner; or packet station.

The best course is to **stay** on standard FM voice simplex frequencies where you really belong. If you do not know all the frequencies available for FM voice simplex, see the first page of the Repeater Directory for a complete recommended listing.

Smithfield Hamfest

The Triangle East ARA (NC) will hold its first hamfest beginning at 8:30 a.m. October 21 in the Smithfield Moose Lodge at I-85 and Highway 70A. Setups begin at 6:56 a.m. Talk-in will be on the 146.88 repeater.

For more info, write P.O. Box 255, Smithfield, N.C. 27577 or phone W2AC days at (919) 553-4309, or nights KK4YP, (919) 965-9577.

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Packeting In West Virginia

— by: Ted Wolfe WD4KHL

As you noted in my regular column; WEST VIRGINIA NOTES; my interest in packet radio has been rekindled. As a result I checked the packet listings for West Virginia in the last **Journal.**

I discovered if you're a packeteer the listing doesn't tell you too much. The digipeater listed for Huntington hasn't been on for more than a year I am told by packet operators near the area. And since we've reached another plateau in the packet development plan and programs such as NET-ROM and THENET are now operating simple digipeater listings are not as helpful as they once were.

Packeteers now want to know about "nodes" or "switches" operating in an area in order to develop signal paths to distant destinations. So far as I know we have no TCP/IP operations in West Virginia.

The last protocols represented by NETRON and THENET eliminate much of the ack back to the source problem. The new "nodes" or "switches"; and hereafter we'll use the terms interchangeably, handle the "housekeeping" details. As it was once explained to me; moving from node to node as you connect further down the line to a destination is like moving your station to the location of the last node you've disconnected to. This may help non packeteers visualize what is happening.

As a practice; when I connect with a new node I give it the "i" command to force it to give an identification. The node replies with geographical information; in most instances; which tells you where it is physically located.

I have developed a list of nodes in West Virginia. I don't warrant that I found them all. But if I've missed one you packeteers can let me know for any future update.

I find it handy to keep a notebook at hand and when I get a node identification by working it I write down its alias and the actual ham call with appropriate subsidiary or SSID number and the geographic location of that node. I find aliases are easier to work with than trying to remember all those calls and SSIDs.

For example I've gotten to New Bern; NC, from Cabin Creek, WV; via BEE; DPK, ASHB; FAY, to EWN. That translates to BEE Mountain near Marmet WV; to Dismal Peak near Pearisburg; VA; to Asheboro, NC. to Fayetteville, NC; and finally to EWN at New Bern.

With the following list of West Virginia nodes on 145.010 Mhz you should be able to work anywhere within or through the Mountain State. The alias is given first; then the call with SSID; then the location:

CRW:WB8IFS - Charleston

BEE:WB8IFS-3 - outside Charleston near Marmet; Kanawha Co.

NOBE:WB8IFS-1 - ner Nobe Calhoun County.

WWVA:W8TN-1 - near Ravenswood.

NCWA:KA8ZXP-1 - Clarksburg WV

NEWVTA:KA8ZXP-3 - Terra Alta; WV.

WCWV:N8HWI-1 - New Martinsville,WV.

PKB:WA8CRW-1 - Wood Co., south of Parkersburg.

LOGAN:WB8FQJ-1 - Logan. WV.

WMSON:WR8M-1 - Williamson, Mingo Co.; on Kentucky line.

HTS:WA8VRS-1 - Hurricane; Putnam Co.

SCOTT:N8BHP-1 - Scott Depot; Putnam Co.

WVMD:KA8ZXP-5 - near Terra Alta; Preston Co.

From some of the aliases you can get an idea of what part of the state the node serves: WWVA for Western VA; NCWV for North-Central WV; WCWV for West Central WV; NEWVTA is a bit more difficult but it is for Northeast WV/Terra Alta; and WVMD is designed to facilitate traffic between those two states.

Besides those already listed there are two special cases:

BEEUHF:WB8IFS-4 a UHF link from BEE mountain to the WB8CQV PBBS at South Charleston; and

CRWLAN:WB8IFS-6 at Charleston. This is a crossover point allowing those on 145.010 to connect on that input with the output on the Charleston area Local Area Net (LAN) frequency of 145.05 (more on that in a moment) or vice versa.

West Virginia nodes list

Because of the heavy use of 145.010 Mhz; hams west of Charleston organized a LAN on 145.050 Mhz. There is a node on that frequency. It is HURC:N9DMK-2. HURC is for Hurricane in Putnam County.

I can't hear the signals on 145.050 Mhz. But I can work a friend who is on that frequency by connecting on 145.010 Mhz with BEE then CRWLAN; then (now on 145.050Mhz) to HURC to take advantage of its coverage; to my friend. Only the connected station on .05 crosses over to .01 so that not all the traffic on the two frequencies become intermixed.

Remember, nodes do not function like a digipeater.

• • • •

In other packet news; WB8CNN-1, which was simply a digipeater on Flat Top Mountain in Raleigh County on 145.010 Mhz; is no longer operational. It has been changed to a frequency of 145.090 Mhz and while at the same location now has the call WB8WKO-0. The station is a digi; not a node; and .090 ties in with a southwestern Virginia LAN operating group.

And from the July issue of "Loud'n Clear;" the newsletter of the Jackson County ARC at Ripley there's this note. 'W8TN distributed PACKETCLUSTER(TM) system for Dxing information and announced a new digipeater on 145.090 Mhz.' There were no further details but it appears that area is getting a LAN operating on 145.090 Mhz.

And in my pile of notes it appear the Southwest Virginia LAN on 145.090 Mhz also feature the N4KZL-9 digipeater (no node) at Wytheville. I believe I need to credit that information to Charley; WB8CNN, who provided other information also.

Quesenberry Is Awarded Charles Litz Scholarship

The Briarpatch ARC recently awarded the Second Annual **Charles Litz Memorial Scholarship** to Darin Richard Quesenberry. Darin is a senior at Carroll County High School and is the son of Mr. and Mrs. Bennie Quensenberry of Rt. 3 Hillsville Virginia.

The Scholarship is in the memory of Charles Litz a local amateur who was killed while serving the youth of the area. Area seniors who intend to major in an amateur related field such as engineering; communications; electronics, or instrumentation are eligible to apply for the scholarship. The scholarship is awarded based on the need and academic promise of the applicants.

The Briarpatch Amateur Radio Club wishes to thank the students who applied for the scholarship and the local counselors for their help in making this year's scholarship program a success. Donations to the fund may be made to the **Charles Litz Memorial Scholarship Fund;** c/o The Briarpatch Amateur Radio Club; Inc.; 202 Locust St.; Galax; VA 24333.

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Data Base Sheets will be mailed only to the trustee on Record for each individual repeater. Please see that this sheet is completed and returned prior to December 31, 1989. You do not have to Join SERA to have your Repeater Listing corrected.

Please remember, the information contained in the SERA Repeater database is used to supply the ARRL information for future National Directories, and is used by area coordinators when coordinating new repeaters.

It is in your best interest to see that we have correct listings of all your repeater systems. Remember, membership in SERA is not a prerequisite for maintaining your listing.

If you have any questions, write:

SERA MEMBERSHIP, P.O. BOX 24292, WINSTON-SALEM, N.C. 27114-4292.

ARRL Board Votes To Propose Codeless Amateur License

The ARRL Board of Directors in July voted to propose in the form of a Petition for Rulemaking to the FCC, a Codeless Amateur license class.

By a vote of 9 to 6, the Board agreed to the proposal which include the following main points:

- The examination will consist of Element 2 and an expanded Element 3A having additional questions, including ones related to Morse code.
- License examinations wil be given through the VEC examination system.
- To upgrade to Technician, the new licensee will pass a five word per minute Morse code test administered through the VEC system.
- Call signs shall be assigned from the Group D Call Sign Block (2x3 calls presently assigned Novices and Technicians).
- Frequency privileges shall be 220 Mhz and above, with the output power limited to 250 watts.
- The licensee shall not be the control operator of a repeater or auxiliary station.

The League felt the most descriptive name to give the new class licensee be that of "Communicator", the same name suggested by the FCC in their codeless class operator proposal in 1974. The League Directors emphasized that the proposal is similar to the old FCC proposal in **name only**.

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ITU Assigns New Prefixes in Pacific

—Fm ARRL Letter

The ITU has allocated the call sign prefix V6 to the Federated States of Micronesia (formerly one of the users of the KC6 prefix). Amateur stations will use call signs V63AA through V63ZZ.

The call sign prefix V7 has been allocated to the Republic of the Marshall Islands (formerly KX6). Amateur stations will use call signs V73AA through V73ZZ. (Via Dept. of Interior)

Comment

No Code or No No Code!

Continued From Page 1

isn't going to make them come in droves into Amateur Radio."

Many resent the fact, that they had to study hard to learn the code, and don't feel that anyone else should have a "freebie" as far as getting an Amateur License.

Some are scared that if a code-free license is issued, our bands will fill up with undesirables and ruin our service. Some who still oppose a code-free license are willing to allow a controlled situation-type license where the new "operator" will be very restricted and operate on a very small slice of Amateur frequencies.

And What Does the Editor Think!

I think both sides have a valid argument. I agree, keeping a person out of Amateur Radio just because he cannot learn the code (there are some out there), or doesn't want to learn the code is really unjustified. I once could copy 45 wpm CW in the fifties, but when I got my Amateur license in 1958, I never again made a CW contact. I wasn't against code, I just felt, for me there was a faster and better way to communicate. Other people feel CW is the **only** way to operate. That's the beauty of Amateur Radio (after we get our license), we can operate any mode we desire, as long as we desire.

The people who argue that a no-code license isn't going to cause a tide of youngsters to join our ranks are probably right. The youngsters of today are too busy, with too much going on to stop and learn Amateur radio. Two exceptions might be those who are introduced to radio while still in school, and those whose parents are Amateurs. Otherwise, the kids of today have "more important things to do."

I think we need to move forward in Amateur Radio today, along with technology. Do we really need to require a person learn to copy CW? I think not. I would rather see us require much more strict testing on: (1) Rules and regulations (2) Operating procedures (3) The purpose of Amateur Radio, the responsibility of being a ham. (4) Old time courtesy that has made Amateur Radio (5) Technical knowledge enough to know what is going on, and how to install your station, and operate your radio properly.

I see these things as being much more important. If you disagree, get on the bands and listen a bit. Can you blame all this on CW? I'm sorry, but I can't.

Maybe we're just barking up the wrong tree. Let's all sit back and re-evaluate our standards and requirements for Amateur Radio. Let's make an attempt to fix what is broken and leave the other parts that don't matter alone. Our love of the hobby deserves our best effort. Let's give it!!!

-Wayne C. Williams, K4MOB
Editor, The Repeater Journal

MIRAGE/KLM

The Next Generation

The amplifiers you have been waiting for are available for shipment NOW!

New protection circuitry automatically shuts off the output power to prevent damage to output transistors and provides shutdown for high VSWR as well.

New GaAs-FET pre-amp designs provide gain of over 22 dB and a noise figure of *less* than .6 dB!

144 MHz Amplifiers

B-1016-G	**10W in = 160W out**
B-3016-G	**30W in = 160W out**
B-215-G	**2W in = 150W out**

220 MHz Amplifiers

C-1012-G	**10W in = 120W out**
C-3012-G	**30W in = 120W out**
C-211-G	**2W in = 110W out**

Each of the following amplifiers provide . . . Bullet-proof, thermal shutdown . . . VSWR shutdown . . . over-current shutdown . . .

144-MHz Amplifier

Finally, a ruggedized high-speed RF switching relay that takes the punishment SSB-op's demand . . . 5mS or less typical switch-time . . . Dual-gate GaAs MES-FET pre-amp . . . greater than 22 dB typical gain . . . Wide, dynamic range for overload protection . . . 1 dB compression > +4 dBm

B-3030-G
30W in = 300W out

(Linear curve: 1W - 30W, 45W max.)
13.8 vDC 32 amps max.
440 watts (DC) 68% efficiency

H-F Amplifier All Solid State (Awaiting FCC Type-Acceptance)

The Band-Pass filter allows wideband performance while meeting FCC specifications . . . 1.8 - 25 MHz (Domestic). Typical harmonic - 50 dB . . . attenuator for reduction of pre-amplifier power should your radio experience intermodulation . . . gain out back to 14-15 dB.

120% ICAS duty cycle . . . air cooled . . . fan hood available . . . active cooling kit available for 100% key-down duty cycle.

HF-5080
50W in = 800W out

13.8 vDC
1,215 watts (DC)
88 amps
Also Available with power supply

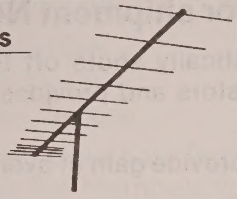
Contact your local dealer to order or call us direct.

MIRAGE/KLM
P.O. BOX 1000 MORGAN HILL, CA 95037
(408) 779-7363 • (800) 538-2140 (outside CA)

KLM BEAMS AND ANTENNAS

6M thru 450 Mhz. Antennas IN STOCK!

ANTENNAS FOR 2-Meters



2M-13LBA

144-148 Mhz., 13 elements with 13.3 dBd gain. Boom Length is 21.5 feet. 9 lbs., 2-in mast.

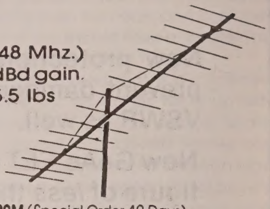
List Price - $95.00
Sale Price - $89.95 *Use Horizontal or Vertical*

Please note: KLM antenna gain figures are based on the Universal Standard Measurements; (dBd; dBdC). Some other antenna companies use **Isotrophic Sources** as gain figures; which reflect much higher; but not standard gain figures.

ANTENNAS FOR 2-Meters	
2M-11X - 11 ele., 12.5 dBd-15.3' Boom (List $87)	$79.95
2M-13LBA - 13 ele.; 13.3 dBd-21.5' Boom (List $99)	$89.95
2M-16LBX - 16 ele., 13.2-14.5 dBd-28' Boom (List $202)	$169.95
2M-8 - 8 elements, 10.3 dBd-7.25' Boom (List $102)	$83.00
2M-4X - 4 elements (end mt.) 8.5 dBd-4.2' Boom (List $64)	$57.95
2-METER CIRCULAR POLARIZATION	
2M-22C - 22 elements; 13 dBdc-19' Boom (List $221)	$189.95
2M-14C - 14 elements, 11 dBdc-12.75' Boom (List $170)	$149.95
2-METER VERTICALS	
JV-2 60-in. tall, 144-148 Mh. 5 db/gr pl (List $116)	$99.95
JV2X 11-ft. tall; 144-148 Mh. 7 db/gr pl (List $159)	$135.95
220 Mhz. BEAMS	
220-7 - 7 elements, 8.8 dBd-4.75' Boom (List $79)	$69.95
220-14X - 14 elements; 13.5 dBd-14.5' Boom (List $113)	$99.95
220-22LBX - 22 elements, 15.6 dBd-29.75' Boom (List $142)	$129.95
JV-220X - 88-in Tall VERTICAL 7 dB/gr pl (List $146)	$129.95
432 BEAMS	
432-20 LBX - 20 elements, 15.3 dBd-12.3' Boom (List $151)	$129.95
432-30 LBX - 30 elements; 17.3 dBd-22' Boom (List $175)	$149.95
435 CIRCULAR POLARIZATION BEAMS	
435-18C - 18 ele. 12 dBdC, w/CS-2 sw-7.3' Boom (List $222)	$189.95
435-40CX - 40 ele. 15.2 dBdC-175.5" Boom (List $259)	$205.00
440-450 FM BEAMS	
440-6X - 6 elements; 8.9 dBd-2' Boom (List $57)	$52.95
440-10X - 10 elements, 10.2 dBd- (List $68)	$62.95
440-16 - 16 elements, 11.5 dBd (List $125)	$115.95
440-27 - 27 elements; 13.5 dBd-12' Boom (Closeouts)	$99.00
JV-440X - 420-470 VERTICAL, 7 db/gr pl. (List $122)	$99.00
6-METER ANTENNAS	
JV-6 - 6-Meter, 50-54 Mhz. 15' Tall-5 db/gr pl. (List $109)	$89.00
6M-5 - 5 elements; 9.7 dBd-11.75' Boom (List $209)	$175.95
6M-7LB - 7 elements; 11.5 dBd-25.75' Boom (List $304)	$254.95

CJ SERIES 1.8 dBd; CLOSED LOOPS

CJ2M (2M) . $33.00 CJ220M (220 Mhz) $32.00 CJ440 (440 Mhz) . . $29.00



2M-11X

144-146 (usable 143.148 Mhz.) 11 elements with 12.5 dBd gain. Boom Length 15.4 ft. 5.5 lbs

List Price - $84.00
Sale Price - $79.95

HF TRI-BAND BEAMS 10-15-20M (Special Order-10 Days)	
KT-34A TRI-BAND 7 dBd, 4 el-16 ft boom (List $501)	$419.00
KT-34XA TRI-BAND 8.5-11.3 dBd; 6 el (List $723)	$599.00
SHIPPING: KT-34A, UPS .... $21.00 KT-34XA; Truck	approx. $70.00

Also available from KLM & Williams (Special order: Tailor to your needs). Phasing/Stacking Harnesses, "H" Stacking frameworks, baluns, sleeve baluns, coaxial baluns, antenna couplers/power dividers, ferrite baluns.

NOTE; Prices for UHF/VHF (In Stock) antennas plus UPS shipping or freight. (Approximately $5.00). All HF beams will be drop-shipped from the factory, by truck and freight will be billed C.O.D. Delivery within 10 days to 2 weeks. Prices subject to change without notice. N.C. residents add 5% Sales Tax. NO CREDIT CARDS. For Phone CODs add $2.50.

COMET

ANTENNAS FOR THE PROFESSIONAL AMATEUR

146/446MHz DUAL BAND AND MONO BAND

RCI 2900 10M All Mode Xcvr. 10 mem; 28-29.999 (List $359) . $299.00

Dual Band Base/Repeater Antennas (2M/440)	
CA-2x4Z - 8.2/11.5 db - 15' tall (List $192.85)	$179.00
CA-2x4FX - 4.5/7.2 db - 6' tall (List $121.25)	$115.00
Base/Repeater Antennas 2M - 440 Mhz	
CA-ABC 23 - (2 Meters) 7.8 db - 15' Tall (List $129.95)	$119.00
CA-712EF - (440 Mhz) 12.5 db - 17.6' Tall (List $133.00)	$125.00
Dual Band Mobile Antennas (2m/440)	
CA-2x4M - 4.5/7 db - 5' long "M" type mt. (List $78.25)	$65.95
CA-2x4SR - 3.8/6.2 db - 3.4' long "M" type mt. (List $64.95)	$52.95
CHL-23J - 2.15/3.8 db - 1.8' long "M" type mt. (List $39.95)	$32.95
Miscellaneous Items	
CH-72S 2M/440 RUBBER DUCK-3.2 db-17.5" long (List $35.10)	$29.95
CF-416 2M/440 DUPLEXER w/M & N conn cables (List $65.70)	$55.00

Other Comet Products may be special ordered. They include dual-band and tri-band antennas (mobile and base/repeater) and duplexers for 440 900 and 1200 mhz. in various combinations. Ask about prices and delivery times. Watt/SWR meters are also available; plus mobile antenna mounts; coax switches and low loss coax.

Now! Celebrating 15 Years of Service!

WILLIAMS RADIO SALES
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FOR THE BEST DEAL!
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NOON TO 10:00 P.M. EST

MIRAGE GIVES YOU POWER!!

Amplifiers for 2M, 6M, 220, 450 From Williams

Williams can provide a Mirage amplifier for your every need on any VHF/UHF band; at almost any power input and output level. All MIRAGE amplifiers have a one year warranty on RF devices, other components guaranteed for 5 years. Most 2M & 220 Medium and Large models have GaAs Fet pre-amplifiers, and operate all-mode; 12 to 13.8 VDC.

MIRAGE 6M AMPLIFIER (All Mode w/Preamp)

A-1015 - 1/2-10W In = 10-150W Out; (List $316)	$269.00

MIRAGE 2M AMPLIFIERS (All Mode; 12-13.8 VDC) ("G" = GaAsfet Preamps)

B-23A - 1/4-5W In = 5-40W Out; (List $142)	$129.00
B-23S - 1/4-5W In = 5-40 W Out; (No Preamps) (List $109)	$99.00
B-215G - 1/4-5W In = 38-165W Out; (List $319)	$269.00
B-108 - 1/2-15W In = 8-88W Out; (List $196)	$159.00
B-1016G - 1/2-15W In = 12-175Out (List $319)	$269.00
B-3016G - 1-45W In = 16-175W Out; (List $369)	$249.00
B-3030G - 30W in-300W out; (GaAs Mes Fet) (List $487)	$429.00

2 METER REPEATER AMPLIFIERS

B-215R REPEATER - 1W In = 110W Out; (List $490)	$399.00
B-1016R REPEATER - 2W In = 120W Out, (List $456)	$389.00
B-3016R REPEATER - 12W In = 120W Out, (List $447)	$359.00

MIRAGE 220 MHZ. AMPLIFIERS (All-Mode - "G" = GaAsfet Preamps) $129.00

C-211G - 1/4-5W In = 52-126W Out; (List $319)	$269.00
C-106 - 1/2-15W In = 5-78W Out; (List $218)	$179.00
C-1012G - 1/2-15W In = 7-145W Out, (List $319)	$269.00
C-3012G - 1-45W In = 8-135W Out; (List $282)	$249.00

220 REPEATER AMPLIFIERS (SPECIAL ORDER 5-6 weeks)

C-211R REPEATER - 1/2W In = 80W Out; (List $508)	$399.00
C-1012R REPEATER - 5W In = 90W Out; (List $508)	$399.00
C-3012R REPEATER - 15W In/90W Out; (List $438)	$369.00

MIRAGE 430-450 MHZ. AMPLIFIERS (All-Mode with "N" Conn)

D-15N - 1-2W In = 15W Out, (List $167)	$149.00
D-26N - 1-5W In = 17-79W Out; (List $239)	$205.00
D-1010N - 1/2-15W In = 12-130W Out; (List $351)	$299.00
D-3010N - 10-40W In = 50-130W Out; (List $323)	$279.00

440 REPEATER AMPLIFIERS (SPECIAL ORDER 5-6 WEEKS)

D-1010NR REPEATER - 4W In/80W Out (List $534)	$419.00

(REPEATER AMPLIFIERS ARE AVAILABLE WITH "N" TYPE CONNECTORS AT NO ADDITIONAL CHARGE - ADD "N" DESIGNATOR TO REPEATER MODEL NUMBER.)

MIRAGE WATT/SWR METERS (Peak or Ave. w/3 Pwr. Scales)

MP-1 HF Meter (1.8-30 Mhz) 2,000W; (List $188)	$169.00
MP-2 VHF Meter (50-200 Mhz) 1,500W: (List $188)	$169.00
MP-3 UHF Meter (420-450 Mhz) (List $214) (Special Order)	$189.00
MP-4 UHF Meter (1260-1300 Mhz) (List $227) (Special Order)	$199.00

RC-1 Amp Remote Control w/18 foot cable (List $45.00)	$39.95

Prices and Models subject to change without notice or obligation. NO CREDIT CARDS. Add $3.00 UPS shipping. N.C. Residents add 5% Sales Tax. For Phone CODs add $2.75. Shipped UPS only!

Larsen Antennas
The Amateur's Professional™

LARSEN MOBILE ANTENNAS 2-METERS; 220 MHZ; 450 MHZ

MAGNETIC MOUNT - with coax; Conn., Coil, Whip and Mount (Complete)
"LM" .... $46.95 "NMO" $48.95

TRUNK LIP MOUNT-with coax; Conn., Coil, Whip and Mount (Complete)
"LM" .... $43.95 "NMO" $46.95

TRUNK MT "L" BRACKET-w/coax; Conn., Coil, Whip & Mount (Complete)
"LM" .... $41.95 "NMO" $44.95

PERM. MOUNT - 3/4" Hole; w/coax; Conn.; Coil, Whip and Mount (Complete)
"LM" .... $39.95 "NMO" $41.95

2M & 220 Antennas are 5/8-wave with 3 db gain.
450 Antennas are 5/8 over 1/2 Collinear with 5 db gain.
BLACK COIL & WHIP - Add $4.00. BLACK "L" BRAC. - Add $1.00

DUAL BAND 2M/440 ANTENNAS "NMO" OR "PO" - 2.4 & 4 db gain.
Coil & Whip Only - $35.95 (Mount Extra) Black Coil - Add $1.00

Individual Prices on Larsen Antenna Parts

COILS: Work with Mounts and Whips 2M & 220

"LM" 2M & 220	$21.00	440 (coil & whip)	$28.00
"NMO" 2M & 220	$22.00	440 (coil & whip)	$30.00
"NMO" 27-34 Mhz	$24.00	Dual-Band Coil/whip	$35.95

BLACK coils avail on 2M & Dual Band only – add $1.00

MOUNTS: (complete with conn.; mount and coax)

MAGNETIC (MM)	"LM" $25.00	"NMO" $25.00	"PO" $26.00
TRUNK LIP (TLM)	"LM" $21.00	"NMO" $23.00	
PERMANENT (K)	"LM" $11.95	"NMO" $14.95	"PO" $19.95

NEW! Black Round Magnetic Mount .. (NMO) $28.00 (LM) $27.00

MOUNTS: (No coax or connector) (B)

"LM" ...... $4.50 "NMO" .... $6.95 "NLA" ..... $5.95 "PO" $8.95

1/4-WAVE (Q) Whips with Mounting Screws (Require Mobile Mount)

"LM" Stainless Steel	$4.50	"LM" Black (teflon coat)	$5.95
"NMO" w/Gray Mt.	$8.95	"NMO" Blk. (teflon coat)	$11.95
"NMO" Chrome Mt.	$9.95		

WHIPS - W-490 works on 2M; 220; 10M All Models

W-490 Stainless Steel .... $9.00 W-490B Black Teflon Coat $12.00

LARSEN HANDHELD DUCKS & ANTENNAS (BNC Conn)

HELICAL (std); & STOUT (subbie) for 2M; 220 or 440	$14.95
HELICAL QUARTER WAVE - 2M (Specify ICOM or All Others)	$18.00
HALFWAVE DUCK - 450 Mhz. only	$14.95
HALFWAVE TELOSCOPING ANTENNA (For H/Ts)	$26.95
DUAL BAND DUCK 2/70 (2M & 440 Mhz)	$23.95

We stock numerous other Larsen replacement parts; including Rubber Gaskets; Hole Plugs; Whip Tips (balls); O-rings; Rain Caps; Allen Wrenches; Springs and Cones.

All Larsen antennas & parts generally in stock. Prices and models subject to change without notice or obligation. N.C. residents add 5% Sales Tax. For Phone CODs add $2.75. All antennas shipped via UPS only. Add $1.75 for H/T antenna shipping; $3.00 for Mobile antenna shipping.

Now! Celebrating 15 Years of Service!

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NOON TO 10:00 P.M. EST

NC Tax Office Abolishes Flea Market Vender License

The North Carolina Department of Revenue has abolished the special NC Privilege License "Flea Market Vender". It was a requirement prior to July 1, 1989. North Carolina dealers with regular Privilege Licenses to operate an Amateur Business were also required to buy the "Flea Market Vender" license. Legally all other flea market vendors were required to have the license.

In its place, a regular flea market vender is required to purchase and display a regular retail sales tax license conspicuously and prominently displayed so as to be visible for inspection by patrons of the specialty market vender at the location where goods are to be sold.

Regular North Carolina dealers; who have purchased the regular "Privilege License" and retail sales tax license must display this license accordingly at all retail outlets in which they sell merchandise.

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REPEATER JOURNAL
At Special Bulk Prices
For Members of Your Group!

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UPS Shipping Prepaid
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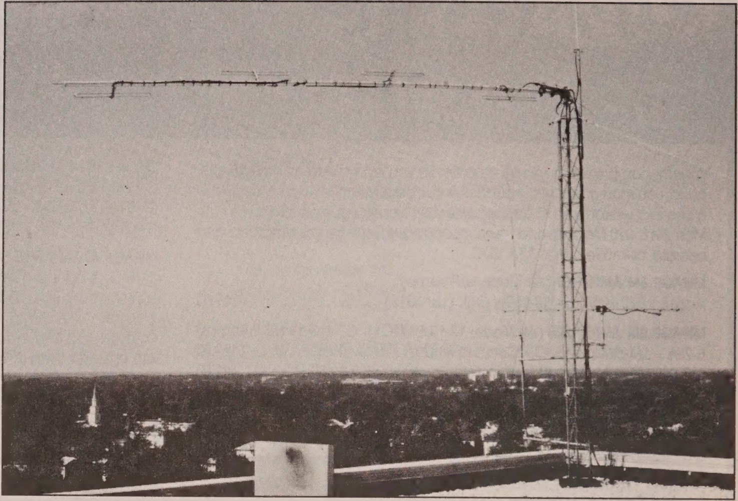
Minimum Order is 10 Copies

ORDER TODAY!
The Repeater Journal. . . the best way to indoctrinate New Club Members to VHF/UHF!

If you have members of your club, or repeater group who are not members of SERA, but would like to have copies of the REPEATER JOURNAL, send today for this special offer. Save 50¢ per copy off the newsstand price. Remember minimum order is 10 copies, shipped to one address via UPS

JOURNAL GRAPHICS
600 Lakedale Road
Colfax, N.C. 27235

Horizontally Polorized Repeater?



The Winston—Salem, N.C. WA4GIC repeater antenna took a turn for the worse when severe tornadoes hit the city in May. The repeater tower located atop Baptist Hospital was bent over right at the top of the 20-foot tower. The Amateur tower fared pretty well though. A 300-foot commercial tower less than 500 yards away was blown over by the high winds. (Photo provided by David Ward, KA4LVO)

1989 Full Membership Virginia at 92%!!!

SERA Full Membership continues to climb slowly at an all-time record number of repeaters. The goal of 700 repeaters is only 10 away.

The most fantastic membership numbers come out of Virginia. Director, Wally Burkett, and Vice Director, Don Williams through their letter writing campaign to repeat owners, have gotten a whopping 92% response of Virginia's SERA repeaters.

Setting an all-time number of Full Member repeaters for one state is North Carolina with 171 repeaters for 77.7% of the State. Virginia has 150 member repeaters.

Third is East Kentucky with 76.5% full membership. Other states include: South Carolina with 69%, and West Virginia with 54%

Failing to achieve 50% membership so far are Georgia with 40.7% and Tennessee with 37.3%.

States setting new records for repeater memberships are North Carolina, South Carolina, Virginia, Tennessee and East Kentucky. Georgia is 25 repeaters shy of their 1986 record.

Overall SERA Full Membership repeaters is 59.3%, or 678 of 1112 repeaters.

Other Full member repeaters include 20 in West Kentucky, 2 in Alabama and 12 in Mississippi.

It should be noted that the SERA Board will vote on petitions this month to expand East Kentucky to the entire State, and allow Mississippi to become the 8th SERA District.

SERA FULL MEMBERSHIP-1983 TO DATE   Correct thru #422 7-18-89

STATE	FINAL 1983	FINAL 1984	FINAL 1985	FINAL 1986	FINAL 1987	FINAL 1988	CURR 1989	1989 MBR %	STATE RPTRS
N.C.	100	83	149	147	123	145	171	77.7%	220
S.C.	24	35	56	43	44	46	58	69.0%	84
VA.*	58	60	92	88	98	99	150	92.0%	163
W.VA	28	21	41	40	51	39	50	54.3%	94
TENN.	47	58	85	63	80	80	101	37.3%	271
GA.**	9	18	109	125	110	100	100	40.7%	246
EKY	1	4	18	21	19	15	26	76.5%	34
KY***	--	--	--	--	--	--	20	---	--
ALA***	1	1	4	67	7	5	2	---	--
MISS***	--	--	--	--	--	3	12	---	--
TOTALS	268	280	554	598	532	532	690	59.3%	1112

* Total Virginia list does not include 41 repeaters which are in-T-MARC territory, North of Highway 33 and Latitude 38-deg.North.
**Ga.& EKY assumed SERA District Status in late 1985.
***AL,MS & KY not SERA districts and not counted in totals.

ANNOUNCING

THE 9th ANNUAL
GREATER GREENSBORO HAMFEST

DATE: November 25 & 26, 1989
HOURS: Sat. 9:00 A.M. - 5:00 P.M. & Sun. 9:00 - 3:00
LOCATION: Franklin Blvd. National Guard Armory
PRIZES: To Be Announced
TICKETS: $4.00 Advance - $5.00 At The Gate
FLEA MARKET: Price Of Ticket & $2.00 (Outside)
INSIDE: Price Of Ticket & $12.00 (per 6′ table)
TAILGATERS: Price Of Ticket & $2.00
LADIES: Our Xmas Craft Vendors Will Be Back Again!
SHOPPING: Shuttle Bus Service will be provided to the Four Seasons Town Centre Shopping Mall! There will be a special drawing for the ladies that attend this outing. Saturday Only!
FCC EXAMS: Will be given Sat. & Sun. by Pre-Reg. Only!
FORUMS: To Be Announced
TALK-IN: 146.760 (-.600)
145.250 (-.600)
146.520 - Simplex

INFORMATION — REGISTRATION — TICKETS
GREATER GREENSBORO HAMFEST
P.O. BOX 8252
GREENSBORO, N.C. 27419

PHONE: (919) 292-6565
EXCEPT WEDNESDAYS

NORTH CAROLINA

TEARC/VEC Exams

Kernersville

FIRST SATURDAY of each month. Contact Bob Gatese, KJ4IC, (919) 996-5196. THIRD SATURDAY of each month. Contact Ray Anderson, AA4LT, (919) 882-3869. Exams for both sessions at 9:30 a.m. at Kernersville Public Library. Fee $4.75. Walkins allowed.

Other TEARC Examiners

LEXINGTON, NC - Contact: Rae Everhart, K4SWN, (704) 249-8734. WILMINGTON, NC - Contact: Don Conaway, AF4J, (919) 791-9460. MORE TEARC EXAMS - Contact: Jim Williamson, **NQ4T**, (919) 841-7576.

WAVE Examinations - Raleigh, NC

Wake Amateur VEs conduct examinations at St. Augustine's College. 4 times per year in February, May, August and November. Pre-registration generally requested, but walkins are accepted up until 30 minutes prior to exam time. Contact: J.M. Johnson, WM4P, 2118 Lyndhurst Dr., Raleigh, N.C. 27610, for further information and schedules.

Raleigh RARS Exam Schedule

Raleigh Amateur Radio Society (RARS), conducts exams in conjunction with their regular monthly meetings, Wednesdays at 7:00 p.m. Exams are held at the YMCA on Hillsborough St. (close to NCSU main campus). For more information and pre-registration, contact Vince Yakamavich, AA4MY, (919) 847-8512. Exams are either W5YI or ARRL. June 7, July 5, Sept. 6, Oct. 4 and Dec. 6.

WEST VIRGINIA

W5YI Examinations

Bluefield, Virginia VE Team

Exams (Novice thru Extra) every second Saturday each Quarter, Feb., May, Aug., and Nov. 9:00 A.M., Bluefield State College. Walkins are preferred. Contact: Don Williams, WA4K, (703) 326-2411 or (703) 326-3338.

Charleston, W. Va.

The Kanawha Valley group gives Novice thru Extra class exams at 9:00 a.m., 2nd Saturday of EACH month, at Holy Trinity Catholic Church in Nitro. Walkins are accepted. Talkin on the 40-00 St. Albans repeater.

TENNESSEE

WCARS Examinations

Blount County, Maryville

Second Monday-Each Even Month, 7:00 P.M. at St. Andrews Church Hall - Maryville, walkins normally accepted. Contact: Carrol Peabody, W4PCA (615) 982-5839. June 12, August 14, Oct. 9, and Dec. 11.

Cleveland

Quarterly Exams at STAR Club Building, June, Sept., and December. Walkins normally accepted. Contact: Russell E. Lawson, WB4LCB, (615) 476-8476. Alternate contact, Herschel N. Hamby, N4ADO, (615) 472-1752. June, Sept. & Dec.

Knoxville

Third Saturday of each month normally. Pellissippi State Tech. Room B-129. June 17, July 15, Aug. 19, Sept. 16, Oct. 21, Nov. 18 and Dec. 16. Pre-registration required. Contact: Ray Adams, N4BAQ (615) 688-7771. Alternate contact, Rich Slover, ND4F, (615) 525-5923. Also scheduled at Knoxville Hamfest May 20.

VE EXAMINATIONS

— Compiled via VEC Announcements

The Repeater Journal will publish authorized VE examination schedules quarterly in each issue. VECs and VEs are encouraged to use this vehicle to publicize their examination schedules FREE of charge. Send schedules to the Repeater Journal editor. Deadlines are 1st of Month prior to month of publication.

Chattanooga

For examination schedules and times, contact Bruce A. Adams, KA5DLV, (615) 899-9687. Walkins normally accepted.

Loudon County, Loudon

Fourth Saturday of each Even month, at Loudon County Justice Center, Sugar Limb Road. Walkins normally accepted. Contact: Bob Gray, KE4SK, (615) 458-6115. June 24, Aug. 26, Oct. 28 and Dec. 23.

Morgan County

Second Saturday of each ODD month at Joyner Volunteer Fire Dept., Coalfield. Walkins normally accepted. Contact: Paul Seavers, AA4UP, (615) 435-6052. May 13, July 8, Sept. 9, and Nov. 11.

Roan County

Second Saturday of EVEN months at Pond Grove School, Rockwood. Walkins normally accepted. Contact: Richard Spillee, AA4KS, (615) 354-4281. Alternate, Bill Smelcer, KA4AAD, (615) 882-9070. June 10, Aug. 12, Oct. 14 and Dec. 9.

Other WCARS Examinations

FENTRESS CTY. - TN. Contact: Mike Ledbetter, AB4BX, (615) 879-8626. HENRY CTY. - TN. Contact: Mackie Gallimore, AA4YF, (901) 247-5489. JASPER - TN. Contact: Charles Wooten, KD4XX, (615) 942-5116. COLUMBIA - SC. Contact: Ray Rogers, N4WR, (803) 345-3373.

GEORGIA

WCARS/VEC Examinations

Dalton

Exams scheduled on fourth Saturday of even months. NO walkins. Held at Unity Methodist Church at 4:00 p.m. Contact Bert L. Coker, N4BZJ, (404) 673-2214 or alternate, Harold Jones, N4OTC, (404) 278-7077. June 24, Aug. 26, Oct. 28 and Dec. 23.

KENTUCKY

WCARS/VEC Examinations

Hazard

Examinations usually held on some Tuesdays at 7:00 p.m. at Ray G. Eversole School. Walkins normally accepted. For exact dates and additional information, contact John Farler, K4AVX, (606) 436-5354.

Middlesboro

First Saturday of each even numbered month at Middlesboro Library. Walkins normally accepted. Contact Wade Bevins, WA4OBL (606) 337-8165, or alternate James Dyke, KZ4Z, (615) 869-4453. June 3, Aug. 5, Oct. 7 and Dec. 2.

VIRGINIA

W5YI Examinations

Danville

Danville VE team, 6:30 p.m. last Tuesday of each month, January through November at Danville Community College, Hill Building. Contact Jim Bond, AB4FZ, (804) 799-2422.

Southeastern Virginia

Walkins accepted, but contact would like to know in advance that you are coming to take the test. Bring original and photo copy of current license and any upgrade certificates. Check for $4.75 to ARRL/VEC or W5YI/VEC (as indicated at exam site schedule below). For Chesapeake DX Assn. exams make check payable to Bill Verebely/VEC. For HRRA exams, make check payable to HRRA/VEC.

AUG. 19 - Hampton Roads RA (W5YI exam). Contact Bill Runyon, N4BDH 487-8611.

SEP. 16 - ARRL Virginia State Convention - Virginia Beach PAVILION (ARRL exam). Contact Sid Evans, N4IIC 851-5573.

OCT. 7 - Williamsburg ARC (ARRL Exam). Contact Andrew Swanson, WJ4X 253-2811.

NOV. 4 - Portsmouth ARC (ARRL exam). Contact Art Thiemens, AA4T 484-2857.

DEC. 2 - Virginia Beach ARC (ARRL exam). Contact Tom Weikel, KA4UNC 340-7697.

SOUTH CAROLINA

WCARS Examinations

Columbia

Saturdays as indicated. Red Cross Building on Bull St. at 9:00 a.m. Walk-ins accepted. Check for $4.75 payable to WCARS/VEC along with original and photocopy of current license and photo I.D. such as Driver's license. For more information, contact Ray Rogers, N4WR, P.O. Box 550, Chapin, S.C. 29036 (803) 345-3373. Talkin on 83-43 rptr.

Exam Schedule

October 21

December 9

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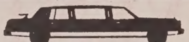

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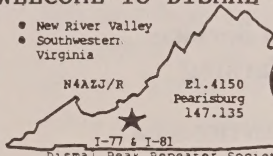

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Coming Events

SERA REPEATER JOURNAL CALENDAR OF EVENTS

AUGUST, 1989

19-20	1st High Point RC Hamfest, HIGH POINT, NC
19-20	SE Div.ARRL Conv. HUNTSVILLE, AL
26-27	Hamfest, MADISON, GA
26-27	Computerfest 89, DAYTON, OH
27	Hamfest, CEDARS OF LEBANON, TN

SEPTEMBER, 1989

2-3	32nd Annual Hamfest, SHELBY, NC
9-10	Hamfest, MELBOURNE, FL
9-10	Hamfest, MOBILE, AL
10	Foundation AR Hamfest, GAITHERSBURG, MD
16-17	Va.St.ARRL Conv/Hamfest, VIRGINIA BEACH, VA
16-17	Cincy Hamfest, CINCINATTI, OH
23	Hamfest, SPRUCE PINE, NC
24	Hamfest, Lanierland ARC, GAINSVILLE, GA
Sep.30-Oct.1	Hamfest, BILOXI, MS

OCTOBER, 1989

1	1st Annual JARSFEST Hamfest, BENSON, NC
1	Hamfest, ROCK HILL, SC
14-15	Hamfest, MEMPHIS, TN
14-15	Hamfest, W.PALM BEACH, FL
15	13th Annual CARA Hamfest, HOWARD CTY, MD
20-22	QCWA Nat'l Convention, BATON ROUGE, LA
21	1st Annual Hamfest, SMITHFIELD, NC
21	Tri-Cities Hamfest, GRAY, TN
21-22	Central Ga.Hamfest, WARNER ROBBINS, GA
28-29	Hamfest,CHATTANOOGA, TN

NOVEMBER, 1989

12	Hamfest, CONCORD, NC
11-12	Hamfest, FT. LAUDERDALE, FL
18	12th Annual Hamfest, MONTGOMERY, AL
18	Hamfest, SUMTER, SC
18-19	ARRL Fl.Sec.-Suncoast Conv '89, TAMPA, FL
25-26	Hamfest, GREENSBORO, NC

FCC May Charge for Licenses

—via Westlink Report

The House Energy and Commerce Committee voted July 13 to levy licensing fees on ham radio operators and satellite-launching companies and to increase fees on communications businesses to help reduce the federal budget deficit by $50 million.

Under the bill, existing licensing fees charged by the FCC will go up an average of 12.6 percent, and seventeen communications areas that were exempted will have fees instituted ranging from $30 for an Amateur radio license to $70,000 for a permit to launch a satellite. FCC fines that have not been changed since 1934 will also be increased.

Most of the $50 million in revenue will come from new fees, and about a third coming from private radio operations such as rural radio, national paging services, offshore, mobile and Amateur radio and users of cellular phones.

At this time both GMRS and Class D Citizens Radio appear to be exempted, unless the FCC were to re-institute Part 95 licensing.

Revenues from all the FCC collections will go into the nation's general fund, with only their normal appropriation going to the FCC as with all other Governmental agencies.

It is not known when or if this bill will be placed before Congress.

New Part 97 Rules Approved By FCC

The rewrite of Amateur Radio rules and regulations; Part 97 has been released. The Commission as well as about everyone agreed the revision was necessary and timely.

The new Part 97 - Rules Governing the Amateur Radio Service has about 25% less wording than the old rules.

Copies of the new rules are available from several sources, as book publishers get their books compiled; printed and on the market.

In brief, the rules decided that no change was necessary in the "Basis and Purpose" of Amateur Radio.

The Commission said Non-commercial "swap nets" will be permitted on the amateur airwaves; providing goods are offered on an irregular basis without a profit motive. Re-transmitting signals from other services will remain prohibited.

In the form of Emergency Communications; Amateurs temporarily bridge the gap when disaster strikes and normal communications systems are overloaded; damaged or disrupted. Amateur stations should not be used; however, as an alternative to other authorized radio services. When a disaster strikes; the FCC may declare a temporary state of communications emergency. The declaration will set forth any special conditions and rules to be observed.

The FCC said they would allow Amateur communications that relate to the public's safe observation and participation in a parade; marathon or similar public event if the principal beneficiary is the public and any benefit to the sponsor is incidental. They said "avoiding the cost of obtaining communications in the proper radio service is not a valid basis for using the ARS facilities.

On the subject of news gathering the Commission said news gathering/reporting transmissions directed to foreign countries cannot be permitted because of the international radio regulations. The transmission of reports for journalists must not detract from the emergency communications of other amateur stations.

An Amateur station may only transmit news information for dissemination to the public when all of the following conditions are present: (1) The information involves the immediate safety of life of individuals or the immediate protection of property. (2) The information is directly related to the event. (3) The information cannot be transmitted by any other means because normal communications systems have been disrupted; or because there are no other communications systems available at the place where the information is originated, and (4) Other means of communications could not be reasonably provided before or at the time of the event.

In Amateur testing, the FCC now specifies the number of questions that must be answered correctly for each written element; rather than a percentage of correct answers. On code testing; the policy is that a telegraphy receiving test alone is adequate proof of both sending and receiving ability.

The **Definitions of Terms** in the rules now has a condensed separate listing of terms.

The new Part 97 rules will become effective September 1 1989.

Obtaining Copies of Rules

W5YI reports the new Part 97 rule book is available for $2.00 postpaid; or $5.00 for 5 copies. Write W5YI, P.O. Box 565101, Dallas, Tx. 75356.

ARRLs 8th Edition "Fcc Rule Book" will probably be available through bookstores and Amateur Dealers by now. Cover price is unknown at this time.

Other publications are sure to be available, giving every Amateur a chance to read and digest the new Part 97 Amateur Rules and Regulations - must reading for all licensed Amateurs.

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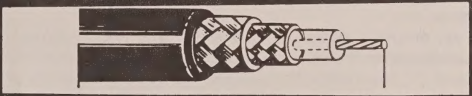

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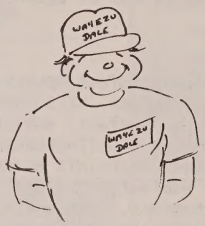

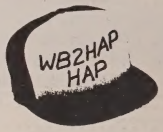

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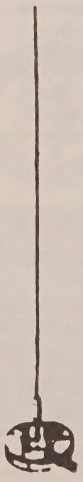

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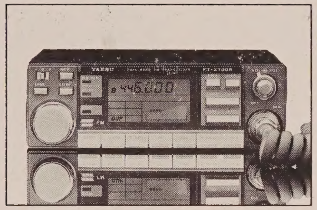

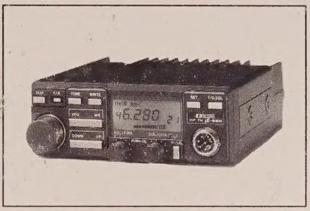

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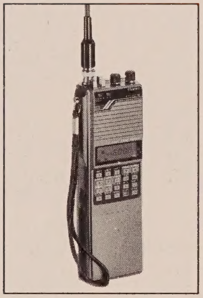

For a limited time Alinco Electronics will give a $100.00 "Reward" for your working, 2 meter or 70 centimeter Mobile Transceiver, or $50.00 for your working 2 meter or 70 centimeter Hand-Held Transceiver.

The way it works is really quite simple. Just take or send your old, but working, transceiver to your favorite dealer for **TRADE-IN**. Whatever the dealer offers for Trade-In allowance, Alinco will increase the amount by either $50.00 or $100.00, depending on whether it's a Hand-Held or Mobile, **ON THE SPOT!** There are only two requirements:

1) The Trade-In "Reward" can only be used towards an Alinco DR-510T Dual Band Mobile or an Alinco DJ-500T Dual Band Hand-Held, on a Mobile for Mobile and Hand-Held for Hand-Held basis.

2) The Trade-In unit must be in good working order and salable.

Remember, the company that already gives you the best value for your dollar, and a two year factory warranty, now gives you something else that no other company does – A substantial Trade-In "Reward" for using our products! *****OFFER GOOD AT TIME OF SALE ONLY. OFFER EXPIRES AUGUST 31, 1989*****

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